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DOMINION OF CANADA

ANNUAL DEPARTMENTAL REPORTS

1927-28

VOL. II

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OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

ANNUAL DEPARTMENTAL REPORTS

VOLUME I

Auditor General, for the fiscal year ended March 31, 1928.

VOLUME II

Public Accounts, for the fiscal year ended March 31, 1928.

National Revenue, Department of, (Customs and Excise), containing accounts of Revenue with statements relative to the Imports, Exports, and Excise of the Dominion of Canada, for the fiscal year ended March 31, 1928.

National Revenue, Department of, (Shipping Report, Customs), containing the Statements of Navigation and Shipping for the fiscal year ended March 31, 1928.

Trade and Commerce, Department of, for the fiscal year ended March 31, 1928.

Weights and Measures Inspection Service (Trade and Commerce), for the fiscal year ended March 31, 1928.

Electricity and Gas Inspection Services (Trade and Commerce), for the fiscal year ended March 31, 1928.

Board of Grain Commissioners for Canada (Trade and Commerce), for the crop year ended August 31, 1928.

Interior, Department of the, for the fiscal year ended March 31, 1928.

Immigration and Colonization, Department of, for the fiscal year ended March 31, 1928.

Indian Affairs, Department of, for the fiscal year ended March 31, 1928.

Mines, Department of, for the fiscal year ended March 31, 1928.

Agriculture, Department of, for the fiscal year ended March 31, 1928.

National Defence, Department of, (Militia and Air Service), for the fiscal year ended March 31, 1928.

National Defence, Department of, (Naval Service), for the fiscal year ended March 31, 1928.

Pensions and National Health, Department of, for the fiscal year ended March 31, 1928

Health, Department of, for the fiscal year ended March 31, 1928.

VOLUME III

Superintendent of Penitentiaries, for the fiscal year ended March 31, 1928.

Royal Canadian Mounted Police, for the year ended September 30, 1928.

Secretary of State, Department of the, for the fiscal year ended March 31, 1928.

Commissioner of Patents, for the fiscal year ended March 31, 1928.

Archives, for the year 1928.

Civil Service Commission, for the calendar year ended December 31, 1928.

External Affairs, Department of the Secretary of State for, for the fiscal year ended March 31, 1928.

Labour, Department of, for the fiscal year ended March 31, 1928.

VOLUME IV

Public Printing and Stationery, Department of, for the fiscal year ended March 31, 1928.

Marine and Fisheries (Marine), Department of, for the fiscal year ended March 31, 1928.

Marine and Fisheries (Fisheries), Department of, for the fiscal year ended March 31, 1928.

Post Office, Department of the, for the fiscal year ended March 31, 1928.

Public Works, Department of, for the fiscal year ended March 31, 1928.

Railways and Canals, Department of, for the fiscal year ended March 31, 1928.

Board of Railway Commissioners for Canada, for the calendar year ended December 31, 1928.

Chief Electoral Officer (By-elections for the year 1928).

VOLUME V

Trade of Canada (Imports for Consumption and Exports), for the fiscal year ended March 31, 1928.

CANADA

PUBLIC ACCOUNTS

FOR THE

FISCAL YEAR ENDED MARCH 31,

1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Freeman Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the Public Accounts of Canada for the Fiscal Year ended March 31, 1928.

All of which is respectfully submitted.

J. A. ROBB,
Minister of Finance.

OTTAWA, January 10, 1929.

TABLE OF CONTENTS

Report of the Deputy Minister of Finance

	Page
Ordinary Receipts and Payments	ix
Special Receipts and Expenditures	ix
Capital expenditures	x
Debt	xi
Funded Debt	xii
Savings Banks	xii
Investments	xii
Dominion Notes	xiii
Guaranteed Securities	xiv
Balance Sheet	2
Expenditure and Revenue	4
Condensed Cash Statement	6

Schedules to Balance Sheet

Schedule A—Advances to Provinces, Banks, etc	8
" B—Advances to Foreign Governments	8
" C—Soldier and General Land Settlement Loans	8
" D—Miscellaneous Current Accounts (receivable)	8
" E—Public Works—Canals	8
" F— " Railways	9
" G— " Miscellaneous	9
" H—Military Property and Stores	10
" I—Territorial Accounts	10
" J—Railway Accounts (old)	10
" K— " (Loans Non-active)	10
" L—Miscellaneous Investments and other Accounts (Non-active)	11
" M—Savings Bank Deposits	11
" N—Insurance and Superannuation Funds	11
" O—Trust Funds	12
" P—Contingent Funds	12
" Q—Province Accounts	13
" R—Miscellaneous Current Accounts (payable)	13
" S—Temporary Loans	13
" T—Funded Debt	13
" U—Interest Due and Unpaid	14
" V—Guaranteed Securities	15

Schedules of Expenditure

Schedule 1—Agriculture	16
" 2—Finance	16
" 3—Immigration and Colonization	17
" 4—Indian Affairs	17
" 5—Interior	18
" 6—Justice	18
" 7—Labour	20
" 8—Legislation	20
" 9—Marine and Fisheries	21
" 10—Mines	22
" 11—National Defence	23
" 12—National Revenue	23
" 13—Pensions	24
" 14—Post Office	24
" 15—Public Works	25
" 16—Railways and Canals	25
" 17—Royal Canadian Mounted Police	26
" 18—Soldiers' Civil Re-establishment	26
" 19—Soldier and General Land Settlement	27
" 20—Trade and Commerce	27
" 21—Other Departments—	
Archives	28
Auditor General's Office	29
Civil Service Commission	29
External Affairs	29
Government Contracts Supervision Committee	29
Health	29
High Commissioner's Office	30
Insurance	30
Office of the Secretary to the Governor General	30
Printing and Stationery	30
Privy Council	30
Secretary of State	30

SCHEDULES OF EXPENDITURE—*Concluded*

PAGE

Schedule 22—Miscellaneous 31
" 23—Adjustment of War Claims 31
" 24—Cost of Loan Flotations 31
" 25—Miscellaneous Charges 32

SCHEDULES OF REVENUE

(Comparative with 1926-27)

Schedule 26—National Revenue 33
" 27—Finance 33
" 28—Interior 34
" 29—Marine and Fisheries 34
" 30—Patent and Copyright Office 35
" 31—Post Office 35
" 32—Public Works 35
" 33—Railways and Canals 36
" 34—Trade and Commerce 36
" 35—Other Departments—
Agriculture 37
Archives 37
Civil Service Commission 37
External Affairs 37
Government Contracts Supervision Committee 37
Health 37
Immigration and Colonization 37
Indian Affairs 37
Insurance 37
Justice 37
Labour 37
Legislation 38
Mines 38
National Defence 38
Office of the Secretary to the Governor General 38
Public Printing and Stationery 38
Royal Canadian Mounted Police 38
Secretary of State 38
Soldiers' Civil Re-establishment 38
Soldier Settlement Board 38
Superannuation Revenue 38
Schedule 36—War and Demobilization Receipts 39
" 37—Special Receipts 39

SCHEDULES TO CASH STATEMENT

Schedule AA—Advances to Foreign Governments 40
" BB—Insurance and Superannuation Funds 40
" CC—Trust Funds 40
" DD—Miscellaneous Current Accounts 40
" EE—Soldier and General Land Settlement 41
" FF—Public Works Capital—Canals 41
" GG— " Railways 41
" HH— " Miscellaneous 42
" II—Advances to Provinces, Banks, etc 42
" JJ—Savings Banks 42
" KK—Contingent Funds 42
" LL—Loan Accounts (Funded Debt) 43
" MM—Interest due and unpaid 43

COMPARATIVE TABLES

Table of Expenditure and Revenue 44
Table of Debt of Canada 46
Table of Receipts from War Tax Revenue 47

APPENDICES

No. 1—Funded Debt payable in Canada and interest payable thereon 50
No. 2—Funded Debt payable in London and interest payable thereon 52
No. 3—Funded Debt payable in New York and interest payable thereon 53
No. 4—Statement of Consolidated Fund 53
No. 5—Sinking Fund Purchases 54
No. 6—Civil Government, and Miscellaneous Expenditures by Departments 55
No. 7—Interest on Public Debt 57
No. 8—Charges of Management 60
No. 9—Premium, Discount and Exchange Expenditure 65
No. 10—Superannuation Expenditure 66

APPENDICES—*Concluded*

	PAGE
No. 11—Public Works Expenditure (chargeable to Income)	104
Public Works Expenditure (chargeable to Collection of Revenue)	118
No. 12—Adjustment of War Claims—Department of National Defence	118
No. 13—Interest on Investments	119
No. 14—Casual Revenue	122
No. 15—Fines and Forfeitures	127
No. 16—Premium, Discount and Exchange Revenue	129
No. 17—Superannuation Revenue	130
No. 18—Superannuation Fund No. 5, Revenue	131
No. 19—Loans authorized and redeemed	132
No. 20—Superannuation and Retirement Fund Acts, Number of Officials, etc	133
No. 21—Decayed Pilots Pension Fund	135
No. 22—Halifax Pilots Pension Fund	135
No. 23—St. John Pilots Pension Fund	136
No. 24—Sydney Pilots Pension Fund	136
No. 25—Statement of Account, Canadian Northern Railway Co., issue of £1,622,586-19-9	137
No. 26—Statement of Account, Canadian Northern Railway Co., issue of $45,000,000	137
No. 27—Statement of Account, Canadian Northern Ontario Railway Co., issue of £7,350,000	138
No. 28—Statement of Account, Canadian Northern Alberta Railway Co., issue of £647,260	138
No. 29—Statement of Account, Canadian Northern Alberta Railway Co., issue of £733,561	139
No. 30—Indian Trust Funds	140
No. 31—Dominion Notes Circulation	140
No. 32— " withdrawn from circulation and destroyed	141
No. 33— " issued and redeemed and in circulation	141
No. 34—Silver Recoinage Statement	142
No. 35—Copper Recoinage Statement	142
No. 36—Dominion Notes issued to Assistant Receivers General	143
No. 37—Dominion Notes and Bank Notes in Circulation	143
No. 38—Canadian Gold Coin issued by the Mint	144
No. 39—Silver and Bronze coinage for Canada	145
No. 40—Deportation of American and Newfoundland Coinage	146
No. 41—Subsidies to Provinces	147

DEPARTMENT OF FINANCE,

OTTAWA, January 10, 1929.

Honourable J. A. ROBB,
Minister of Finance.

SIR,—I have the honour to submit to you the Public Accounts of Canada for the fiscal year ended March 31, 1928.

ORDINARY RECEIPTS AND PAYMENTS

The receipts for the year on account of Consolidated Fund amounted to $422,717,982.68, and the expenditure on the same account to $336,167,960.98, showing a surplus of ordinary receipts over ordinary expenditures of $86,550,-021.70.

SPECIAL RECEIPTS AND EXPENDITURES

In addition to the ordinary receipts and payments there were special receipts of $7,129,568.76 and special expenditures of $3,566,296.72, leaving an excess of $3,563,272.04 of receipts over the expenditures as a credit to Consolidated Fund:—

Special Receipts:—		
War and Demobilization Receipts—		
Refunds of Previous Years' Expenditure	$ 204,974 25	
Payments received on account of Reparations from Germany—		
Under the Dawes Plan	3,002,047 78	
Arrears—Pre-Dawes	3,789,430 00	
Miscellaneous	133,116 73	
		$ 7,129,568 76
Special Expenditures:—		
Adjustment of War Claims	$ 1,860,985 25	
Cost of Loan Flotations	13,057 70	
Home Bank Depositors' Relief Act	205,032 55	
Civil Service Superannuation Act, 1924 (Government contribution to the Fund)	1,402,210 32	
Miscellaneous Charges	85,010 90	
		$ 3,566,296 72
Excess of Special Receipts over Special Expenditures		$ 3,563,272 04

CAPITAL ACCOUNT

The following outlays were made during the year and charged to Capital—

CANALS (Schedule FF)—		
Trent Canal	$ 41,023 02	
Welland Ship Canal	14,188,495 28	
		$14,229,518 30
RAILWAYS (Schedule GG)—		
Canadian Government Railways Exchequer Court Awards	$ 9,653 09	
Hudson Bay Railway	3,883,026 16	
New Brunswick and Prince Edward Island Railway	63,418 77	
Canadian Pacific Railway, original construction	71 00	
		3,956,169 02
Total Railways and Canals		$18,185,687 32
PUBLIC WORKS (Schedule HH)—		
Ottawa—New departmental building	$ 851 60	
Ottawa Parliament Building	174,963 18	
Ottawa—Expropriation of property between Sparks and Wellington Streets east of Elgin Street	42,065 46	
Washington, D.C.—Canadian Legation Building and Site	477,754 35	
Esquimalt, B.C.—New Dry Dock	143,291 25	
Port Arthur and Fort William Harbours	103,962 49	
Quebec Harbour	46,600 87	
Sorel Harbour	188,590 00	
St. John Harbour	181,624 44	
Toronto Harbour	14,709 10	
St. Lawrence River Improvements—		
Ship Channel Dredging	1,921,902 56	
Sorel Shipyard	95,561 83	
		$ 3,391,877 13
Total Capital Expenditure		$21,577,564 45

The following refunds of previous years' expenditure were received and credited to Capital Account—

CANALS—		
Trent Canal	$ 820 00	
Welland Canal	224 00	
Welland Ship Canal	465,569 53	
		$ 466,613 53
RAILWAYS—		
Canadian Government Railways—Sale of S.S. *Drummond* and *McKee*	$ 36,000 00	
Hudson Bay Railway	328,523 05	
		364,523 05

CAPITAL ACCOUNT—*Concluded*

PUBLIC WORKS—		
St. Andrews Rapids, Man	68 75	
St. Lawrence River—Sorel Shipyard	711 27	
Government Shipbuilding Programme—Sale of Ships	110 000 00	
		110,780 02
		$ 941,916 60
Net Charge to Capital Account		$20,635,647 85

LOANS TO MERCHANT MARINE

Loans to the Canadian Government Merchant Marine, Limited, of $999,836.63 were made under authority of the Appropriation Act of 1927.

DEBT

The net debt of the Dominion at the close of the fiscal year was $2,296,850,232.92 or a decrease of $50,984,137.17 under the debt as it stood on March 31, 1927.

The decrease is accounted for as follows:—

REVENUES—		
Ordinary Revenue	$422,717,982 68	
Special Receipts	7,129,568 76	
		$ 429,847,551 44
EXPENDITURES—		
Ordinary Expenditure	$ 336,167,960 98	
Special Expenditure	3,566,296 72	
Capital Expenditure (net)	20,635,647 85	
Loans to Canadian Government Merchant Marine, Limited	999,836 63	
Loans to Quebec Harbour Commissioners	1,458,000 00	
Total Expenditures		$ 362,827,742 18
Surplus of Revenues over Expenditures		$ 67,019,809 26
Soldier Settlement Board Loans—		
Amount transferred to non-active assets to provide for revaluations and losses	13,935,672 09	
Seed Grain and Relief Advances—		
Amount transferred to non-active assets to provide for losses	2,000,000 00	
University Hospital Edmonton transferred to non-active assets	100,000 00	
		$ 16,035,672 09
Net Decrease of Debt		$ 50,984,137 17

Before the close of the fiscal year 1927-28 the amount of Active Assets as previously shown on our balance sheet was reduced by sixteen million dollars ($16,000,000) on account of the following services:—

Chapter 68 of the Statutes of 1927 amended the Soldier Settlement Act of 1919, and provided for the revaluation of loans to Soldier Settlers for the purchase of lands. The Soldier Settlement Board estimated that altogether $8,000,000 should be written off on account of this revaluation. It was also estimated that losses on the re-sale of stock and equipment, as well as of farms which have reverted to the Board, would be entailed to the extent of approximately $6,000,000.

As early as 1876, the Dominion Government through the Department of the Interior commenced making advances for Seed Grain and Relief to needy settlers of the West. A considerable amount of these advances has been outstanding for many years. Many of these accounts to an estimated amount of $2,000,000 are of doubtful value as an asset.

FUNDED DEBT

The surplus of $67,019,809.26 of revenues over all expenditures for the year enabled the Department to provide for the retirement of $61,759,650.00 of outstanding Bonded Debt in the hands of the public, involving the following transactions:—

The 5 Year 5½% bonds of the 1922 Renewal Loan amounting to $29,068,-400, and the 3 Year 4% Treasury Notes issued in 1924 amounting to $8,000,000 matured in November 1927, and were redeemed.

The 10 Year 5½% bonds of the 1917 Victory Loan amounting to $63,437,-250, matured on December 1, 1927. To meet this maturing obligation, 3 Year 4% Treasury Notes to the amount of $45,000,000 were sold to the Chartered Banks of Canada at par. The balance of $18,437,250 of the maturing bonds was redeemed in cash.

In addition, $6,254,000 of 5% bonds of the 1923 Refunding Loan, due October 15th, 1928, were redeemed in advance of the due date by purchase in the open market.

SAVINGS BANKS

At the close of the fiscal year, the balance at the credit of depositors in the Post Office and Government Savings Banks was $31,103,776.26, a decrease of $818,266.53 under the balance held on March 31st, 1927. The withdrawals for the year exceeded the deposits by $1,733,099.07 while $914,832.54 was added for interest accrued.

INVESTMENTS

Sinking Funds

Investments on account of Sinking Funds of the various loans were made during the year to the amount of $3,418,685.69. The total of the investments at the credit of the Sinking Funds, which stood at $45,198,200.28 on March 31, 1927, was therefore increased to $48,616,885.97 on March 31, 1928.

Advances to Harbour Commissioners

Advances were made under statute to the following Harbour Commissioners:—

Montreal Harbour Commissioners	$3,105,000
Quebec Harbour Commissioners	1,458,000
Vancouver Harbour Commissioners	1,564,000
	$6,127,000

During the year, $1,000,000 of Montreal Harbour Commissioners Debentures held by the Dominion matured and were paid.

Loans to Banks

Under authority of the Finance Act, Chap. 70, R.S.C. 1927, advances during the year to an aggregate amount of $301,750,000 were made by way of issues of Dominion Notes to various banks. On April 1, 1927 the outstanding balance on this account was $12,500,000. During the year repayments were received to the amount of $278,250,000, leaving a balance of $36,000,000 outstanding at the close of the year.

Soldier Land Settlement Board

The Loans outstanding to soldiers settling on the land and for General Land Settlement decreased during the year by $804,096.22. This leaves a balance outstanding at the close of the year of $83,345,871.25 of which $69,410,-199.16 is carried as an Active Asset. The balance $13,935,672.09 has been transferred to a Non-Active Account.

Housing Loans

The Provincial Governments reduced their indebtedness to the Dominion on account of Housing Loans by $9,768,440.00 as follows:—

Province of Ontario	$ 9,350,000 00
Province of Manitoba	165,000 00
Province of New Brunswick	58,000 00
Province of Nova Scotia	175,000 00
Province of Quebec	20,440 00
	$ 9,768,440 00

Foreign Governments

Foreign Governments have paid all interest due on their obligations. In addition, the Government of Belgium paid $4,528,336.00 on account of principal, thereby liquidating their debt in full. The Government of Greece, under agreement, paid $195,000.00 on account of principal. The outstanding foreign debts are thus reduced to $7,280,000.00 owing by Greece and $23,969,720.00 owing by Roumania.

DOMINION NOTES

The circulation of Dominion Notes stood at $188,631,489.61 on March 31, 1928, being an increase of $16,463,850.39 as compared with the circulation at the close of last year. Gold held as security amounted to $92,913,894.66. Of the total amount of Notes outstanding, $36,000,000.00 were against approved securities held by the Department under the Finance Act.

GUARANTEED SECURITIES

Canadian National Railway Company:

An issue by the Canadian National Railway Company of $65,000,000 4½% 30-Year Gold Bonds dated July 1st, 1927, was guaranteed as to principal and interest by the Dominion of Canada. The issue was sold to Blair and Company, Inc., the Chase Securities Corporation and the Equitable Trust Company of New York, at a price of 97.02 and accrued interest. This issue was authorized as follows:—

$20,000,000—under authority of the Canadian National Refunding Act 1927, Chapter 27, to refund a like amount of 4% Dominion guaranteed 3-Year Notes which matured July 1, 1927.

$15,000,000—under authority of Appropriation Act No. 3, Chapter 3 of the Statutes of 1926-27.

$16,600,000—under authority of Appropriation Act No. 6, Chapter 76 of the Statutes of 1926-27.

$13,400,000—under authority of the Special Acts in connection with the Toronto Viaduct Scheme and the construction of various branch lines.

Canadian National (West Indies) Steamships, Limited:

Under authority of the Canadian National Steamships' Act, Chapter 29 of the Statutes of 1927 and Order in Council, P.C. 340 March 1st, 1928, the guarantee of the Dominion of Canada was given to $10,000,000 4¼% temporary bonds of the Canadian National (West Indies) Steamships, Limited.

Harbour Commissions:

Under authority of Chapter 58 of the Statutes of 1924 and Orders in Council P.C. 1094 of June 8th, 1927 and P.C. 1862 September 24th, 1927, a 4¾% Interim Debenture of the Montreal Harbour Commission for $4,000,000 was issued and guaranteed as to principal and interest and pledged as collateral for temporary financing with the Royal Bank of Canada.

Under authority of the new Westminster Harbour Commissioners' Act, Chapter 158 of the Statutes of 1913 and Orders in Council P.C. 687 of May 2nd, 1928 and P.C. 1105 of June 26th, 1928, an issue of $700,000 debentures of the new Westminster Harbour Commission, dated April 2nd, 1928, bearing interest at the rate of 4¾% per annum was guaranteed as to principal and interest.

Under Sec. 15 of the St. John Harbour Commissioners' Act, Chap. 67 of the Statutes of 1926-27, the Government of Canada is liable in the event of default by the Harbour Commissioners to pay interest and principal on an indebtedness of $2,135,118.00 representing the value of Harbour Works transferred by the City of St. John to the Commissioners.

Respectfully submitted,

J. C. SAUNDERS,
Deputy Minister of Finance.

BALANCE SHEET

REVENUE AND EXPENDITURE

CONDENSED CASH STATEMENT

SCHEDULES

COMPARATIVE TABLES

APPENDICES

THE DOMINION

BALANCE SHEET

Assets—		$ cts.
Cash on hand and in Banks		45,829,382 04
Specie Reserve		95,352,702 32
Advances to Provinces, Banks, etc., per schedule A		114,752,859 28
Advances to Foreign Governments, per schedule B		31,249,720 00
Soldier and General Land Settlement Loans, per schedule C		69,410,199 16
Miscellaneous Current Accounts, per schedule D		23,692,147 20
Balance being Net Debt March 31, 1928 (exclusive of interest accrued and outstanding) carried forward		2,296,850,232 92
		2,677,137,242 92

		$ cts.
Public Works, Canals, per schedule E		201,448,019 00
Public Works, Railways, per schedule F		429,830,119 93
Public Works, Miscellaneous, per schedule G		200,497,882 36
Military Property and Stores, per schedule H		12,034,169 85
Territorial Accounts, per schedule I		9,895,947 68
Railway Accounts (Old), per schedule J		88,398,828 78
Railway Accounts (Loans non-active), per schedule K		611,747,239 63
Canadian Government Merchant Marine, Limited		10,474,509 85
Miscellaneous Investments and Other Accounts (non-active), per schedule L		32,610,419 82
Balance Consolidated Fund brought forward	$790,026,389 76	
Excess of Revenue over Expenditure, year ended March 31, 1928	90,113,293 74	
		699,913,096 02
		2,296,850,232 92

OF CANADA

MARCH 31, 1928

LIABILITIES—	$ cts.
Dominion Notes in Circulation	188,631,489 61
Bank Circulation Redemption Fund	5,929,219 02
Post Office Account—Money Orders, Postal Notes, etc., outstanding	5,489,215 26
Savings Bank Deposits, per schedule M	31,103,776 26
Insurance and Superannuation Funds, per schedule N	51,639,110 36
Trust Funds, per schedule O	19,755,617 21
Contingent Funds, per schedule P	1,627,575 48
Province Accounts, per schedule Q	9,623,816 77
Miscellaneous Current Accounts, per schedule R	99,673 23
Temporary Loans, per schedule S	201,000 00
Funded Debt, per schedule T	2,360,158,675 48
Interest Due and Unpaid, per schedule U	2,878,074 24
	2,677,137,242 92

	$ cts.
Balance Net Debt March 31, 1928, brought forward	2,296,850,232 92
	2,296,850,232 92

NOTE—The guarantee of the Dominion of Canada has been given to Railway and other Securities as listed in Schedule V.

THE DOMINION

EXPENDITURE AND

YEAR ENDED

EXPENDITURE

Ordinary		$ cts.
Agriculture, per schedule No. 1		7,467,062 86
Finance, per schedule No. 2		3,242,713 62
" Interest on Public Debt, per schedule No. 2		128,902,944 58
" Subsidies to Provinces, per schedule No. 2		12,516,740 50
Immigration and Colonization, per schedule No. 3		3,045,715 32
Indian Affairs, per schedule No. 4		4,401,465 71
Interior, per schedule No. 5		6,841,796 44
Justice, per schedule No. 6		4,385,419 75
Labour, per schedule No. 7		1,640,620 50
Legislation, per schedule No. 8		2,060,725 03
Marine and Fisheries, per schedule No. 9		9,375,131 93
Mines, per schedule No. 10		1,202,743 84
National Defence, per schedule No. 11		17,659,638 24
National Revenue, per schedule No. 12		12,591,714 89
Pensions, per schedule No. 13		39,778,129 50
Post Office, per schedule No. 14		33,823,561 72
Public Works, per schedule No. 15		15,801,590 69
Railways and Canals, per schedule No. 16		8,740,878 02
Royal Canadian Mounted Police, per schedule No. 17		2,349,808 93
Soldiers' Civil Re-establishment, per schedule No. 18		6,991,018 86
Soldier and General Land Settlement, per schedule No. 19		1,386,445 66
Trade and Commerce, per schedule No. 20		5,683,617 29
Other Departments, per schedule No. 21		3,575,937 94
Miscellaneous, per schedule No. 22		2,702,539 16
		336,167,960 98
Special		
Adjustment of War Claims, per schedule No. 23	$1,860,985 25	
Cost of Loan Flotations, per schedule No. 24	13,057 70	
Miscellaneous charges, per schedule No. 25	1,692,253 77	
		3,566,296 72
		339,734,257 70
Balance being excess of Revenue over Expenditure carried to Consolidated Fund		90,113,293 74
		429,847,551 44

CAPITAL

EXPENDITURE	$ cts.
Canals, per schedule FF (to cash statement)	14,229,518 30
Railways, per schedule GG (to cash statement)	3,956,169 02
Public Works, per schedule HH (to cash statement)	3,391,877 13
	21,577,564 45

OF CANADA

REVENUE ACCOUNT

MARCH 31, 1928

REVENUE

Ordinary	$ cts.	
National Revenue, per schedule No. 26—		
Customs Import Duties	156,985,817 65	
Excise Duties	57,400,897 46	
Sales Tax, Tax on Cheques, Transportation Tax, etc	90,222,931 32	
Income Tax	56,571,047 39	
Business Profits Tax	956,031 44	
Trust and Loan Companies Tax	345,429 85	
Sundry Collections	854,168 90	
		363,336,324 01
Finance, per schedule No. 27—		
Chartered Banks	1,224,644 46	
Insurance Companies	999,003 34	
Interest on Investments	10,937,822 38	
Sundry Collections	1,046,279 81	
		14,207,749 99
Interior, per schedule No. 28		3,718,669 53
Marine and Fisheries, per schedule No. 29		849,944 06
Patent and Copyright Office, per schedule No. 30		495,791 84
Post Office, per schedule No. 31		31,567,218 49
Public Works, per schedule No. 32		587,352 28
Railways and Canals, per schedule No. 33		1,528,879 47
Trade and Commerce, per schedule No. 34		3,712,667 89
Other Departments, per schedule No. 35		2,713,385 12
		422,717,982 68
Special		
War and Demobilization Receipts, per schedule No. 36	204,974 25	
Miscellaneous Receipts, per schedule No. 37	6,924,594 51	
		7,129,568 76
		429,847,551 44

ACCOUNT

RECEIPTS	$ cts.
Canals, per schedule FF (to cash statement)	466,613 53
Railways, per schedule GG (to cash statement)	364,523 05
Public Works, per schedule HH (to cash statement)	110,780 02
Balance carried to Capital Account	20,635,647 85
	21,577,564 45

CONDENSED CASH

YEAR ENDED

RECEIPTS

		$ cts.
Balance from fiscal year 1926-27—		
Banks in Canada	$ 16,825,035 64	
Banks in New York	4,790,632 30	
Bank of Montreal, London, England	566,451 02	
		22,182,118 96
Dominion Notes		16,463,850 39
Specie Reserve		5,583,230 70
Bank Circulation Redemption Fund		80,188 92
Post Office Account—Money Orders, Postal Notes, etc		581,384 94
Advances to Foreign Governments, per schedule A.A		4,723,336 00
Insurance and Superannuation Funds, per schedule B.B		8,934,379 45
Trust Funds, per schedule C.C		1,295,448 42
Miscellaneous Current Accounts, per schedule D.D		12,076,764 51
Soldier and General Land Settlement, per schedule E.E		804,096 22
Consolidated Fund, per Expenditure and Revenue Accounts		90,113,293 74
		$162,838,092 25

NOTE—Where there have been both Receipts and Disbursements affecting the above indicated accounts, the net amount only is shown.

STATEMENT

MARCH 31, 1928

PAYMENTS

		$ cts.
Capital Accounts—		
Public Works, Canals, per schedule F.F.	$13,762,904 77	
Public Works, Railways, per schedule G.G.	3,591,645 97	
Public Works, Miscellaneous, per schedule H.H.	3,281,097 11	
		20,635,647 85
Loan to Canadian Government Merchant Marine, Limited		999,836 63
Loan to Quebec Harbour Commission		1,458,000 00
Advances to Provinces, Banks, etc., per schedule I.I.		17,400,560 00
Savings Bank Deposits, per schedule J.J.		818,266 53
Contingent Funds, per schedule K.K.		311,278 60
Loan Accounts (Funded Debt), per schedule L.L.		75,236,521 36
Interest due and unpaid, per schedule M.M.		148,599 24
Balance to fiscal year 1928-29—		
Banks in Canada	$28,463,246 66	
Banks in New York	7,778,581 51	
Bank of Montreal, London, England	9,587,553 87	
		45,829,382 04
		$ 162,838,092 25

SCHEDULES TO BALANCE SHEET

—	$ cts.	$ cts.	$ cts.
SCHEDULE "A"			
Advances to Provinces, Banks, etc.—			
Province of British Columbia (Housing Loans)	1,701,500 00		
Province of Manitoba (Housing Loans)	1,660,000 00		
Province of New Brunswick (Housing Loans)	1,250,000 00		
Province of Nova Scotia (Housing Loans)	1,362,000 00		
Province of Prince Edward Island (Housing Loans)	50,000 00		
Province of Quebec (Housing Loans)	7,317,402 72		
		13,340,902 72	
Loans to Banks, "Finance Act," Chap. 70, R.S. 1927		36,000,000 00	
Montreal Harbour Commission		48,980,000 00	
Montreal Turnpike Trust		133,156 56	
St. John Bridge and Railway Extension Company		433,900 00	
Vancouver Harbour Commission		15,864,900 00	
			114,752,859 28
SCHEDULE "B"			
Advances to Foreign Governments—			
Greek Government		7,280,000 00	
Roumanian Government		23,969,720 00	
			31,249,720 00
SCHEDULE "C"			
Soldier and General Land Settlement Loans—			
Soldier Land Settlement Loans	77,906,181 76		
General Land Settlement Loans	6,063,068 47		
Land Settlement, Purchased Lands	260,431 23		
		84,229,681 46	
Less—Soldier Land Settlement Assurance Fund	663,916 39		
Land Settlement Suspense Account	219,893 82		
Amount transferred to non-active accounts to provide for revaluations and losses	13,935,672 09		
		14,819,482 30	
			69,410,199 16
SCHEDULE "D"			
Miscellaneous Current Accounts—			
Advances to Royal Mint—Gold Purchase Account	1,398,871 29		
" Silver Purchase Account	2,891,398 53		
" Copper Purchase Account	22,465 20		
" Nickel Purchase Account	44,221 37		
		4,356,956 39	
Bank of Montreal, Provincial Notes Suspense		27,622 83	
Canada Grain Act Advance Account		5,851 68	
Canadian Government Railways "Open Accounts"	6,042,932 52		
" " "Stores"	9,757,420 40		
		15,800,352 92	
Dominion Assay Office Gold Purchase Account		76,133 75	
Empire Settlement Scheme, Advances under		148,238 39	
Foreign Coin withdrawn from circulation		68,190 26	
Imperial Government Account		9,206 43	
King's Printer Advance—Printing		123,830 29	
King's Printer Advance—Stationery		70,445 72	
Saskatchewan Government Seed Grain Advances of 1908		93,228 46	
Seed Grain and Relief, Department of the Interior	4,909,499 14		
Less amount transferred to Non-Active Assets	2,000,000 00		
		2,909,499 14	
St. John and Quebec Railway "Stores"		2,590 94	
			23,692,147 20
SCHEDULE "E"			
Public Works (Canals)—			
Burlington Bay Canal		308,328 32	
Chambly Canal, River Richelieu		580,092 59	
Improvement to Trent Canal		559,067 70	
Lachine Canal		11,142,580 65	
Lake St. Peter		1,164,235 08	
Murray Canal		1,248,946 71	
Ottawa Works		6,875,244 17	
Quebec Canals		34,841 69	
Rideau Canal		143,411 12	
Carried forward		22,056,748 03	

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		22,056,748 03	
SCHEDULE "E"—*Concluded*			
Public Works (Canals)—Concluded			
Sault Ste. Marie Canals		4,935,809 42	
St. Anne's Lock—Railway Bridge at Isle Perrot		150,000 00	
St. Lawrence Canals		34,143,925 00	
St. Lawrence Ship Canal		133,896 80	
St. Ours Locks		5,690 91	
St. Peters Canal		492,023 82	
Tay River Navigation		476,128 73	
Trent River Navigation		19,067,746 81	
Welland Canal		29,903,557 66	
Welland Ship Canal		90,082,366 82	
Miscellaneous		125 00	
			201,448,019 00
SCHEDULE "F"			
Public Works (Railways)—			
Canadian Government Railways—			
Canadian Government Railways	72,712,060 92		
Cape Breton Railway	104,520 54		
Caraquet and Gulf Shore Railway	209,950 00		
Elgin and Havelock Railway	33,530 00		
Hudson Bay Railway	19,910,085 03		
Intercolonial Railway	120,174,668 97		
International Railway of New Brunswick	2,681,377 35		
Lotbinière and Mégantic Railway	336,875 00		
National Transcontinental Railway	164,583,262 41		
New Brunswick and Prince Edward Island Railway	360,790 66		
Prince Edward Island Railway	11,744,541 78		
Quebec Bridge	21,706,664 49		
Quebec and Saguenay Railway	6,892,575 85		
Salisbury and Albert Railway	84,390 41		
St. Martin's Railway	72,624 91		
York and Carleton Railway	20,976 16		
		421,628,894 48	
Other Railways and Miscellaneous—			
Digby and Annapolis Railway	660,683 09		
Hudson Bay Railway, Port Nelson Terminals	6,320,360 24		
Hudson Bay Railway, Fort Churchill Terminals	880,643 30		
North Railway	250,000 00		
Governor General's cars	71,538 82		
Miscellaneous	18,000 00		
		8,201,225 45	
			429,830,119 93
SCHEDULE "G"			
Public Works (Miscellaneous)—			
Bare Point Breakwater		217,995 90	
Canadian Building, London, England		1,539,073 11	
Canadian Legation Building and Site, Washington, D.C.		477,754 35	
Cape Tormentine Harbour		236,860 63	
Esquimalt Graving Dock		7,663,842 79	
Georgian Bay to Montreal Waterway Survey		918,796 85	
Government Buildings, Ottawa		28,039,500 32	
Government Shipbuilding Programme		55,653,583 43	
Halifax Dry Dock		1,552,827 43	
Halifax Elevator Site		46,063 27	
Improvements to the St. Lawrence		34,710,785 36	
Kingston Graving Dock		556,589 35	
Land and Cable Telegraph Lines		348,320 77	
Levis Graving Dock		971,592 58	
Montreal Harbour Improvements		1,060,342 83	
New Dominion Building, Toronto		1,166,646 95	
Ottawa, Expropriation of Property between Sparks and Wellington Streets, east of Elgin		42,065 46	
Port Arthur and Fort William and River Kaministiquia		14,983,676 93	
Port Colborne Harbour		904,459 39	
Quebec Harbour Improvements		9,319,252 35	
Carried forward		160,410,030 05	

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		160,410,030 05	
SCHEDULE "G"—*Concluded*			
Public Works (Miscellaneous)—Concluded			
Rainy River, Lock and Dam		133 80	
Sorel Harbour Improvements		188,590 00	
St. Andrews Rapids, including Red River Improvements		1,569,776 99	
St. John Harbour Improvements		17,458,519 58	
Tiffin Harbour Improvements		481,621 59	
Toronto Harbour Improvements		8,974,912 79	
Vancouver Harbour		3,600,078 73	
Victoria Harbour, Ontario, Improvements		761,801 79	
Victoria Harbour, British Columbia, Improvements		5,131,024 94	
Yukon Territory Works		1,921,392 10	
			200,497,882 36
SCHEDULE "H"			
Military Property and Stores—			
Military Property and Stores		12,118,150 87	
LESS—Fort Osborne Barracks, Winnipeg	62,947 27		
St. Helen's Island Barracks Site	19,783 10		
Toronto Barracks Site	1,250 65		
		83,981 02	
			12,034,169 85
SCHEDULE "I"			
Territorial Accounts—			
Northwest Territories, Organization		1,460,000 00	
Northwest Territories, Purchase		1,460,000 00	
Expenses connected with the Northwest Rebellion		826,077 87	
Dominion Lands to March 31, 1911	10,425,395 92		
LESS—Received from Dominion Lands	4,275,526 11		
		6,149,869 81	
			9,895,947 68
SCHEDULE "J"			
Railway Accounts (Old)—			
Canadian Pacific Railway		62,791,435 25	
Grand Trunk Railway Debenture Account		15,142,633 34	
Grand Trunk Railway Interest Account		10,457,458 01	
Grand Trunk Railway Special Account		7,302 18	
			88,398,828 78
SCHEDULE "K"			
Railway Accounts (Loans Non-active)—			
Canadian Northern Railway—			
Ontario Interest Account (Sec. 10, Chap. 6, Acts of 1911)	2,396,099 68		
Interest Account (Chap. 20, Acts of 1914)	5,294,000 02		
Loan Account, 1914 (Chap. 4, Acts of 1915)	10,000,000 00		
Loan Account, 1916 (Chap. 29, Acts of 1916)	15,000,000 00		
Purchase of Capital Stock (Chap. 24, Acts of 1917, Sec. 4, Subsec. 3)	10,000,000 00		
Acquisition of Capital Stock, Legislation 1917 (7–8 George V, Chap. 24)	25,000,000 00		
Loan on account of Interest and Equipment, (Act No. 1, Legislation of 1918)	25,000,000 00		
Loan under authority of vote 108, Appropriation Act, No. 4, 1919	35,000,000 00		
Loan under authority of vote 127, Appropriation Act, No. 4, 1920	48,611,077 00		
Loan under authority of vote 126, Appropriation Act, No. 2, 1921	44,419,806 42		
Loan under authority of vote 136, Appropriation Act No. 1, 1922	42,800,000 00		
Loan under War Measures Act	1,887,821 16		
		265,408,804 28	
Grand Trunk Railway—			
Loan under authority of vote 478, Appropriation Act No. 4, 1920	25,000,000 00		
Loan under authority of vote 126, Appropriation Act No. 2, 1921	55,293,435 18		
Carried forward	80,293,435 18	265,408,804 28	

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	80,293,435 18	265,408,804 28	
SCHEDULE "K"—*Concluded*			
Railway Accounts (Loans Non-active)—Concluded			
Grand Trunk Railway—Concluded.			
Loan under authority of vote 137, Appropriation Act No. 1, 1922	23,288,747 15		
Grand Trunk Pacific Loan of 1913 (Chap. 23 of Acts of 1913), Guaranteed by Grand Trunk Railway Co.	15,000,000 00		
		118,582,182 33	
Grand Trunk Pacific Railway—			
Loan Account of 1914 (Chap. 4 of Acts of 1915)	6,000,000 00		
3 per cent Mortgage Bonds (Chap.24, 3-4 Geo. V, 1913)	33,093,333 23		
Interest Account, Appropriation Act No. 2, 1916	7,081,783 45		
Loan Account, Appropriation Act No. 4, 1917	5,038,053 72		
Loan Account, Appropriation Act, 1918	7,471,399 93		
Receiver Account, O.C. 26th March, 1919, P.C. 635	45,764,162 35		
Guaranteed Interest Account (Guaranteed by the Dominion of Canada)	8,704,662 65		
Branch Lines Coupons (Guaranteed by the Provinces of Alberta and Saskatchewan)	2,898,536 98		
		116,051,932 31	
Canadian National Railways—			
Loan under authority of Appropriation Act, 1923	24,550,000 00		
Loan under authority of Appropriation Act, 1924	10,000,000 00		
Loan under authority of Appropriation Act, 1925	10,000,000 00		
Loan under authority of Appropriation Act, 1926	10,000,000 00		
		54,550,000 00	
Loans to Railways—			
Purchase of Railway Equipment, Chap. 38, Statutes of 1918		57,154,320 71	
			611,747,239 63
SCHEDULE "L"			
Miscellaneous Investments and other Accounts (Non-active)—			
Earl of Selkirk Mortgage on property in Township of Moulton		13,900 00	
Grand Trunk Railway Preference Stock		121,739 65	
High Commissioners "Suspense"		4,230 95	
Italian Government		702 52	
Quebec Harbour Commission		15,229,995 68	
Quebec Turnpike Trust Bond		20,000 00	
Russian Government Account		55,571 82	
Seed Grain and Relief—Department of the Interior		2,000,000 00	
Soldier and General Land Settlement Loans		13,935,672 09	
Southern Alberta Land Company, now the Canada Land and Irrigation Company		380,473 74	
Three Rivers Harbour Debentures	81,760 97		
LESS—Sinking Funds	2,308 41		
		79,452 56	
University Hospital—Edmonton, Alberta		100,000 00	
Unpaid Coupons—New York Loans "Suspense"		45,913 50	
Victoria Shipowners, Limited		621,987 05	
Victory Loan, 1918, Interest Suspense		780 26	
			32,610,419 82
SCHEDULE "M"			
Savings Bank Deposits—			
Post Office Savings Banks		23,463,209 91	
Dominion Government Savings Banks		7,640,566 35	
			31,103,776 26
SCHEDULE "N"			
Insurance and Superannuation Funds—			
Government Annuities		14,719,484 26	
Insurance Fund, Civil Service		4,418,854 91	
Returned Soldiers' Insurance		5,964,246 99	
Retirement Fund		4,757,505 45	
Civil Service Superannuation and Retirement Act, 1893, Chap. 17, R.S. 1906		1,897,316 79	
Civil Service Superannuation Act, 1924, Chap. 24, R.S. 1927		19,881,701 96	
			51,639,110 36

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE "O"			
Trust Funds—			
Alberta School Lands		439,645 61	
Burrard Dry Dock Pontoons		7,418 96	
Common School Fund		2,660,571 30	
Canadian Military Canteen Funds		20,000 00	
Canadian National Railways—			
Equipment issue, 1923, Redemption Account	1,000 00		
Guaranteed Bond issues (outstanding interest)	62,950 00		
		63,950 00	
Contractors Securities		1,061,093 51	
Decayed Pilots Fund	105,846 62		
Less—Amount invested in Bonds (Appendix No. 21)	87,000 00		
		18,846 62	
Empress of Ireland Relief Fund		897 87	
Halifax Pilots' Pension Fund	75,930 13		
Less—Amount invested in Bonds (Appendix No. 22)	68,393 33		
		7,536 80	
Immigration Guarantee and Special Funds		372,005 90	
Indian Funds		13,203,366 84	
Manitoba School Lands		14,858 95	
Militia and Defence Regimental Funds		122,894 50	
Military Estates No. 1		133,453 70	
Military Estates No. 2		19,613 20	
Royal Military College—Cadet Funds		13,284 60	
Saskatchewan School Lands		404,674 47	
Soldiers' Civil Re-establishment—War Service Gratuity		174,464 09	
Soldiers' Civil Re-establishment—Pensions, etc		505,695 79	
St. John Pilots' Pension Fund	41,646 32		
Less—Amount invested in Bonds (Appendix No. 23)	39,000 00		
		2,646 32	
Strathcona Trust Fund		500,000 00	
Sydney Pilots' Pension Fund	34,498 18		
Less—Amount invested in Bonds (Appendix No. 24)	25,800 00		
		8,698 18	
			19,755,617 21
SCHEDULE "P"			
Contingent Funds—			
Banque du Peuple		14,340 85	
Banque St. Hyacinthe		7,247 00	
Banque St. Jean		1,917 23	
Banque Ville Marie		4,549 59	
Bank of Vancouver		3,727 12	
Bank of Yarmouth		859 82	
Board of Pension Commissioners, Mennonite Funds		5,246 29	
Briton Medical and General Life Association Funds		281 06	
Cash Suspense		502,074 98	
Central Bank		2,225 94	
Columbia River Special		2,818 04	
Commercial Bank of Manitoba		6,450 56	
Farmers' Bank		2,044 52	
Home Bank of Canada		58,954 36	
Income Tax, (Appeals) Suspense		7,200 00	
Interior Department, Suspense		717 00	
Internment Operations		23,085 89	
Land Assurance Fund		11,364 20	
Ontario Bank		21,708 23	
Outstanding Cheques		18,353 65	
Prisoners of War		6,288 73	
Railway Grade Crossing Fund		631,645 84	
Railways and Canals, Suspense		5,082 95	
Royal Canadian Mounted Police, Special		582 21	
Sovereign Bank of Canada		9,819 99	
St. Stephens Bank		11,309 67	
Unclaimed cheques, C. G. Railways		1,157 48	
Unclaimed dividends *re* liquidation under Bankruptcy Act		25,248 29	
Victory Loan 1917, at credit of subscribers in arrears		96,895 82	
Victory Loan 1918, at credit of subscribers in arrears		63,584 65	
Victory Loan 1919, at credit of subscribers in arrears		43,655 05	
Victory Loans Canvassers Suspense		1,629 58	
York County Loan and Savings Co. (In Liquidation)		35,508 89	
			1,627,575 48

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE "Q"			
Province Accounts—			
Province of British Columbia Debt Account	583,021 40		
Province of Manitoba Debt Account	3,578,941 20		
Province of Nova Scotia Debt Account	1,055,433 64		
Province of New Brunswick Debt Account	529,299 39		
Province of Ontario Debt Account (47 Vic. C. 4)	2,848,289 52		
Province of Prince Edward Island Debt Account	775,791 83		
Province of Quebec Debt Account (47 Vic. C. 4)	2,549,213 61		
		11,919,990 59	
Less—Province of Nova Scotia Suspense Account	40,161 86		
Province of Prince Edward Island Land Account	782,402 33		
Province of Quebec Debt Account	1,473,609 63		
		2,296,173 82	
			9,623,816 77
SCHEDULE "R"			
Miscellaneous Current Accounts—			
Indian Affairs "Special"		26,524 60	
St. John and Quebec Railway (Open Accounts)		54,022 26	
Unpaid Debentures		17,236 04	
Unpaid Warrants		81 76	
Walter J. King—Suspense Account		1,808 57	
			99,673 23
SCHEDULE "S"			
Temporary Loans—			
Loan of 1917–19, New-York, 5 per cent, due Aug. 1, 1919		1,000 00	
5 per cent Debenture Stock		200,000 00	
			201,000 00
SCHEDULE "T"			
Funded Debt—			
Payable in Canada—			
Provincial Notes, Nova Scotia		39,184 05	
Unpaid Warrants, Prince Edward Island		549 59	
Compensation to Seigneurs		12,140 15	
Compensation to Townships		153 00	
Province of New Brunswick, 6 per cent Loan Debentures		600 00	
Province of Canada, 5 per cent Loan Debentures		400 00	
Dominion Stock, issue A, 6 per cent		4,000 00	
" B, 3½ per cent		20,800 00	
" C, 3½ per cent		48,666 67	
Debenture Stock, 5 per cent 1919		1,000 00	
Debenture Stock, 5 per cent School Lands—			
Province of Alberta	7,839,000 00		
Province of Manitoba	5,850,000 00		
Province of Saskatchewan	15,275,000 00		
		28,964,000 00	
Debenture Stock, 5½ per cent 1921		200 00	
War Savings Certificates		20,155 00	
Dominion of Canada Savings Certificates		19,825 00	
War Savings and Thrift Stamps		104,829 50	
Dominion of Canada War Loan, 1915–25, 5 per cent		76,600 00	
" " 1916–31, 5 per cent		52,931,600 00	
" " 1917–37, 5 per cent		90,166,900 00	
Victory Loan 1917, 5½ per cent, due 1922	121,000 00		
" " 1927	1,303,700 00		
" " 1937	236,299,850 00		
		237,724,550 00	
Victory Loan 1918, 5½ per cent, due 1923	152,300 00		
" " 1933	446,658,800 00		
		446,811,100 00	
Victory Loan 1919, 5½ per cent, due 1924	85,850 00		
" " 1934	511,910,650 00		
		511,996,500 00	
Carried forward		1,368,943,752 96	

SCHEDULES TO BALANCE SHEET—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		1,368,943,752 96	
SCHEDULE "T"—*Concluded*			
Funded Debt—Concluded			
Payable in Canada—Concluded			
Renewal Loan 1922, 5½ per cent, due 1927	553,700 00		
" " 1932	73,325,150 00		
		73,878,850 00	
Refunding Loan 1923, 5 per cent, due 1928	46,746,000 00		
" " 1943	147,000,000 00		
		193,746,000 00	
Refunding Loan 1924, 4½ per cent, due 1944		50,000,000 00	
Refunding Loan 1925, 4½ per cent, due 1940		75,000,000 00	
Refunding Loan 1926, 4½ per cent, due 1930	20,000,000 00		
Refunding Loan 1926, 4½ per cent, due 1946	45,000,000 00		
		65,000,000 00	
Three Year Treasury Notes, 4 per cent, due Dec. 1, 1930		45,000,000 00	
		1,871,568,602 96	
Less Sinking Funds—			
War Loan, 1916–31	799,300 00		
" 1917–37	379,800 00		
Sinking Funds Cash	340,177 90		
		1,519,277 90	
			1,870,049,325 06
Payable in London—			
3½ per cent Loan 1884 (1909-31)	23,467,206 27		
3½ " Canadian Pacific Railway Land Grant Loan, due July 1, 1938	15,056,006 66		
3½ " 1930–50	137,058,841 00		
3 " 1888, due July 1, 1938	8,071,230 16		
3 " 1892, due July 1, 1938	18,250,000 00		
3 " 1894, due July 1, 1938	10,950,000 00		
2½ " 1897, due Oct. 1, 1947	4,888,185 64		
4 " 1940–60	93,926,666 66		
		311,668,136 39	
Less Sinking Funds held on account of—			
Loan of 1884	14,002,161 63		
3½ per cent Loan 1930–50	22,200,478 18		
4 per cent Loan of 1940–60	11,235,146 16		
		47,437,785 97	
			264,230,350 42
Payable in New-York—			
5 per cent Bond Loan 1915–35		874,000 00	
5 per cent Public Service Loan 1916, due 1926	5,000 00		
5 per cent Public Service Loan 1916, due 1931	25,000,000 00		
		25,005,000 00	
5½ per cent Bond Loan 1919–29		60,000,000 00	
5 per cent Bond Loan 1922–52		100,000,000 00	
4½ per cent Bond Loan 1926–36		40,000,000 00	
			225,879,000 00
			2,360,158,675 48
SCHEDULE "U"			
Interest due and unpaid—			
Unpaid Interest (Domestic Loans)		2,040,719 48	
" (New York Loans)		779,560 50	
" (London Loans)		46,438 03	
Unpaid Dividends, Province of British Columbia		33 67	
" Province of Canada		4,663 18	
" Province of New Brunswick		1,279 00	
" Province of Nova Scotia		795 80	
" Province of Prince Edward Island		867 25	
" Dominion Stock		2,717 33	
			2,878,074 24

SCHEDULES TO BALANCE SHEET—*Concluded*

	Amount Authorized	Amount outstanding at March 31, 1928	
		Held by the Public	Held by the Minister of Finance
SCHEDULE "V"	$ cts.	$ cts.	$ cts.
Guaranteed Securities—			
Railway Securities Guaranteed as to Principal and Interest—			
1. Canadian Northern Ry. Co., 3 per cent deb. stock due 1953, £1,923,287- 0- 0	9,359,996 72	9,359,996 72	.....
2. Canadian Northern Ry. Co., 3½ per cent deb. stock due 1958, £1,622,586-19- 9	7,896,590 00	7,896,571 00	.....
3. Canadian Northern Ont. Ry. Co., 3½ per cent deb. stock due 1961, £7,350,000- 0- 0	35,770,000 00	34,229,996 87	1,540,003 13
4. Canadian Northern Alta. Ry. Co., 3½ per cent deb. stock due 1960, £647,260- 5- 6	3,150,000 00	3,149,998 66	.....
5. Grand Trunk Pacific Ry. Co., 3 per cent bonds due 1962, £14,000,000- 0- 0	68,040,000 00	34,992,000 00	33,048,000 00
6. Canadian Northern Alta. Ry. Co., 3½ per cent deb. stock due 1962, £733,561-12-10	3,569,999 98	.....	3,569,996 86
7. Canadian Northern Ry. Co., 4 per cent deb. stock and bonds, due 1934	45,000,000 00	17,060,333 33	12,500,000 00
8. Grand Trunk Pacific Ry. Co., 4 per cent bonds due 1962, £3,280,000- 0- 0	15,940,800 00	8,440,848 00	7,499,952 00
9. Canadian Northern Ry. Co., 7 per cent bonds due 1940	25,000,000 00	24,793,000 00	.....
10. Grand Trunk Ry. Co., 7 per cent bonds due 1940	25,000,000 00	24,743,000 00	.....
11. Canadian Northern Ry. Co., 6½ per cent bonds due 1946	25,000,000 00	25,000,000 00	.....
12. Grand Trunk Ry. Co., 6 per cent bonds due 1936	25,000,000 00	25,000,000 00	.....
13. Canadian National Ry. Co., 5 per cent serial equipment bonds, 1923-38	22,500,000 00	15,750,000 00	.....
14. Canadian National Ry. Co. 5 per cent bonds due 1954	50,000,000 00	50,000,000 00	.....
15. Canadian National Ry. Co. 4½ per cent bonds due 1954	26,000,000 00	26,000,000 00	.....
16. Canadian National Ry. Co. 4½ per cent bonds due 1930	18,000,000 00	18,000,000 00	.....
17. Canadian Northern Ry. Co. 4½ per cent bonds due1935	17,000,000 00	17,000,000 00	.....
18. Canadian National Ry. Co. 1927, 2 per cent Guar. Deb. Stock, £7,176,801- 0- 0	34,927,098 20	33,808,441 33	.....
19. Canadian National Ry. Co., 4½ per cent Gold Bonds, due 1957	65,000,000 00	65,000,000 00	.....
	522,154,484 90	440,224,185 91	58,157,951 99
Railway Securities Guaranteed as to Interest only—			
20. Grand Trunk Ry. Acquisition Guarantees—			
Grand Trunk 4 per cent guar. stock, £12,500,000	60,833,333 33	60,833,333 33	.....
Grand Trunk 5 per cent perp. deb. stock, £4,270,375	20,782,491 67	20,782,491 67	.....
Great Western 5 per cent perp. deb. stock, £2,723,080	13,252,322 67	13,252,322 67	.....
Grand Trunk 4 per cent perp. deb. stock, £24,624,455	119,839,014 33	119,839,014 33	.....
Northern Ry. of Can., 4 per cent perp. deb. stock £308,215	1,499,979 67	1,499,979 67	.....
	216,207,141 67	216,207,141 67	.....
Other Securities Guaranteed as to Principal and Interest—			
21. The Harbour Commissioners of Montreal—Montreal South Shore Bridge 4¼ per cent Bond, payable on demand	4,000,000 00	4,000,000 00	.....
22. The Harbour Commissioners of Montreal—Montreal South Shore Bridge 4¾ per cent Bond, payable on demand	4,000,000 00	4,000,000 00	.....
23. Canadian National (West Indies) Steamships, Limited, 4¼ per cent Temporary Bond, payable on demand not later than Dec. 31, 1929	10,000,000 00	828,789 45	.....
24. St. John Harbour Commission—Bonded indebtedness of the City of St. John assumed by the Commission	1,467,164 96	1,467,164 96	.....
Debentures of the Commission to be issued to the City of St. John	667,953 04	.....	.....
	20,135,118 00	10,295,954 41	.....

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28

—	$ cts.	$ cts.	$ cts.
Schedule No. 1			
Agriculture—			
Civil Government—Salaries	772,341 27		
Contingencies	129,645 11		
		901,986 38	
Agricultural Produce Marketing Agent in Great Britain	11,892 43		
Assistance in the erection of Pre-cooling Plants for fruit	30,000 00		
Branch of Entomology	19,954 09		
Cold Storage Warehouses	16,459 33		
Compensation for Animals tested under the Animal Contagious Diseases Act and dying from the disease for which they were tested before it was possible to slaughter them under the provisions of the Act	250 33		
Dairying, including grant of $5,000 to the National Dairy Council	239,818 81		
Destructive Insect and Pest Act	412,019 72		
Experimental Farms	1,585,570 90		
Experiments in the dehydration of fruits and vegetables	9,443 24		
Fruit Branch, including grant of $8,000 to the Canadian Horticultural Council	261,671 86		
Grant to the Province of New Brunswick *re* the Short Course School at Fredericton, N.B.	5,000 00		
Grant to the Province of Nova Scotia *re* the Science Building at Truro, N.S.	20,000 00		
Health of Animals, Administration of the Animal Contagious Diseases Act and Meat and Canned Foods Act and necessary buildings	2,149,214 30		
International Institute of Agriculture	13,438 76		
Live Stock, including grants to Exhibitions, Feeder Shows, etc.	1,269,510 36		
Publications Branch	19,969 63		
Seed, Feed and Fertilizer Control, including grants to Seed Fairs, etc.	323,552 34		
Worlds Poultry Congress	100,000 00		
		6,487,766 10	
Miscellaneous—			
Compassionate allowance to the widow of late Veterinary Inspector E. M. Eckert	1,000 00		
Gratuities	2,780 00		
Flat increase in salary	73,530 38		
		77,310 38	
			7,467,062 86
Schedule No. 2			
Finance—			
Civil Government—salaries	394,740 00		
Contingencies	39,607 07		
Inspector General of Banks	19,717 14		
		454,064 21	
Lieutenant Governors' Salaries (Appendix No. 6)	.....	81,000 00	
Charges of Management (Appendix No. 8)	.....	884,531 53	
Premium, Discount and Exchange (Appendix No. 9)	.....	42,233 33	
Superannuation (Appendix No. 10)—			
No. 1 Civil Service Superannuation and Retirement Act, 1870, Chap. 17, R.S. 1906	625,004 82		
No. 3 Printing Bureau	19,038 32		
No. 4 Public Service Retirement Act of 1920	723,825 34		
No. 6 Civil Servants Widows' Annuities Act, 1927	130,946 33		
		1,498,814 81	
Miscellaneous—			
Ottawa Branch of the Royal Mint	200,000 00		
Board of Audit	71,317 64		
Flat increase in salary	5,152 10		
Unforeseen expenses	5,600 00		
		282,069 74	
			3,242,713 62
Interest on Public Debt (Appendix No. 7)—			
Funded Debt Payable in London	.....	11,142,780 02	
Funded Debt Payable in Canada	.....	102,456,146 80	
Funded Debt Payable in New York	.....	11,393,716 67	
Temporary Loans	.....	10,000 00	
Carried forward	.....	125,002,643 49	3,242,713 62

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		125,002,643 49	3,242,713 62
SCHEDULE No. 2—*Concluded*			
Finance—Concluded			
Interest on Public Debt—Concluded			
Savings Banks		914,832 54	
Insurance and Superannuation Funds		1,947,736 42	
Trust Funds		864,901 92	
Bank Circulation Redemption Fund		172,830 21	
			128,902,944 58
Subsidies to Provinces—			
Alberta		1,643,942 20	
British Columbia		738,816 66	
Manitoba		1,491,836 16	
New Brunswick		666,765 76	
Nova Scotia		661,841 28	
Ontario		2,642,611 68	
Prince Edward Island		381,931 88	
Quebec		2,256,419 88	
Saskatchewan		2,032,575 00	
			12,516,740 50
			144,662,398 70
SCHEDULE No. 3			
Immigration and Colonization—			
Civil Government—Salaries	275,850 00		
Contingencies	37,566 16		
		313,416 16	
Salaries	800,000 00		
Contingencies	1,052,317 08		
Chinese Immigration—Salaries and Contingencies	61,237 97		
Empire Settlement Scheme	633,689 48		
Exhibitions—Salaries and Contingencies	136,510 21		
Relief of Distressed Canadians abroad	1,379 36		
St. John Immigration Buildings	19,564 06		
		2,704,698 16	
Miscellaneous—			
Gratuities	1,293 33		
Flat increase in salary	26,307 67		
		27,601 00	
			3,045,715 32
SCHEDULE No. 4			
Indian Affairs—			
Civil Government—Salaries	156,552 50		
Contingencies	17,368 81		
		173,921 31	
British Columbia	375,870 87		
Manitoba, Saskatchewan, Alberta and Northwest Territories	875,442 65		
New Brunswick	45,485 59		
Nova Scotia	82,728 52		
Ontario and Quebec	314,002 38		
Prince Edward Island	6,821 01		
Yukon	15,899 28		
General	228,166 18		
Annuities	220,209 00		
Indian Education	2,033,375 10		
Compassionate allowance to Nurse Lamb of Lady Minto Hospital, Cochrane, Ont	1,040 00		
Gratuity to W. S. Hockley, ex-farming instructor in the Qu'Appelle Agency, Saskatchewan	500 00		
		4,199,540 58	
Miscellaneous—			
Gratuities	600 00		
Flat increase in salary	27,403 82	28,003 82	
			4,401,465 71

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 5			
Interior—			
Civil Government—Salaries	1,441,776 73		
Contingencies	88,369 53		
		1,530,146 26	
Dominion Lands and Parks—			
Salaries of the Outside Service	555,128 67		
Contingencies	171,633 15		
Administration of the Migratory Birds Convention Act	56,378 56		
Canadian National Parks	1,184,814 38		
Compassionate allowance to Mrs. E. S. Forbes	1,050 00		
Costs of litigation and legal expenses	4,996 63		
Enlargement of the Western Outlet of the Lake of the Woods	20,000 00		
Fees and contingent expenses of the Board of Examiners for Dominion Land Surveys	2,007 31		
Grant to Alpine Club of Canada	1,000 00		
Grant to Canadian Forestry Association	4,000 00		
International and Boundary Waterways—Professional assistance to advise Departmental Officers	13,061 30		
Investigation under the Inquiries Act into the claim of British Columbia for the reconveyance of certain lands conveyed by that Province to the Dominion at the time of the Union	6,976 20		
Lake of the Woods Control Board	9,289 49		
Ordnance Lands—Salaries and expenses	25,626 15		
Protection of Timber	1,277,907 52		
Publications, including Maps	187,469 36		
Relief by way of necessary supplies of food, clothing, fuel, etc., also fodder for animals, to needy settlers of the Provinces of Alberta and Saskatchewan	3,621 60		
Salaries and Expenses in connection with Seed Grain and relief collections	44,731 57		
The Dominion Government's share of freight charges in connection with the removal of settlers from the drought stricken areas to other districts	19,998 65		
To assist in publishing the transactions of the Association of Dominion Land Surveyors	125 00		
Transfer of Buffalo from Buffalo Park, Wainwright, Alberta, to the Wood Buffalo Park, near Fort Smith, N.W.T.	15,538 31		
Water and Power investigations	477,398 47		
		4,082,752 32	
Scientific Institutions—			
Dominion Observatory at Ottawa	57,367 75		
Dominion Observatory at Victoria, B.C.	19,982 66		
Geodetic Survey of Canada	246,472 79		
Geodetic Survey, International Boundaries	27,863 57		
Topographical and General Surveys	381,992 31		
To compensate the Temiskaming and Northern Ontario Railway in connection with their claim for injury to John Hedin	240 00		
		733,919 08	
Government of the Northwest Territories	.....	249,641 63	
Government of the Yukon Territory	.....	178,510 61	
Miscellaneous—			
Gratuities	2,990 00		
Flat increase in salary	63,836 54		
		66,826 54	
			6,841,796 44
SCHEDULE No. 6			
Justice—			
Civil Government—Salaries	.....	269,083 42	
Contingencies	.....	36,542 06	
			305,625 48
Supreme Court—			
Salaries	85,418 27		
Contingencies	21,205 91		
		106,624 18	
Carried forward	.....	106,624 18	305,625 48

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		106,624 18	305,625 48
SCHEDULE No. 6—*Continued*			
Justice—Continued			
Exchequer Court—			
Salaries	24,400 00		
Contingencies	8,866 95		
Travelling allowances—Admiralty Judges	171 10		
		33,438 05	
Alberta—			
Supreme Court	101,750 00		
District Courts	60,000 00		
Travelling Allowances	27,239 91		
		188,989 91	
British Columbia—			
Court of Appeal	46,000 00		
Supreme Court	55,000 00		
County Courts	70,000 00		
Travelling Allowances	20,122 76		
		191,122 76	
Manitoba—			
Court of Appeal	46,000 00		
Court of King's Bench	53,113 75		
County Courts	50,000 00		
Travelling Allowances	5,510 35		
		154,624 10	
New Brunswick—			
Court of Appeal	28,000 00		
Court of King's Bench	37,000 00		
County Courts	30,833 32		
Court of Divorce	500 00		
Travelling Allowances	8,741 15		
		105,074 47	
Nova Scotia—			
Supreme Court	61,375 00		
County Courts	35,416 66		
Travelling Allowances	6,111 36		
		102,903 02	
Ontario—			
Court of Appeal	39,875 00		
High Court Division	125,915 32		
County Courts	320,105 13		
Travelling Allowances	38,471 78		
		524,367 23	
Prince Edward Island—			
Supreme Court	28,000 00		
County Courts	14,717 66		
Travelling Allowances	604 70		
		43,322 36	
Quebec—			
Court of King's Bench	105,739 52		
Superior Court	354,250 00		
Travelling Allowances	28,918 59		
		488,908 11	
Saskatchewan—			
Court of Appeal	37,000 00		
Court of King's Bench	73,000 00		
District Courts	90,000 00		
Travelling Allowances	19,412 31		
		219,412 31	
Yukon Territory—			
Salaries and Expenses		19,201 03	
Miscellaneous		9,998 04	
Living allowance for Judge of Atlin District, B.C.		1,200 00	
Expenses of Athabaska District Elections Commission		124 74	
Supreme Court—Portraits of Chief Justices		1,000 00	
Exchequer Court—Republishing Admiralty Rules		500 00	
			2,190,810 31
Carried forward			2,496,435 79

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward			2,496,435 79
SCHEDULE No. 6—*Concluded*			
Justice—Concluded			
Penitentiaries—			
Alberta		2,504 73	
British Columbia		216,184 76	
Dorchester		236,809 84	
Kingston		426,102 24	
Manitoba		224,334 38	
Saskatchewan		225,090 26	
St. Vincent de Paul		422,710 40	
General		1,109 55	
Pension to Mrs. Voilet Jenkin, widow of late Penitentiary Guard, M. E. Jenkin		350 00	
Pension to Mrs. Beatrice Williams, widow of late Penitentiary Guard, John Williams		450 00	
Workmens Compensation Board, Province of British Columbia, *re* late Guard, R. E. Farrell		117 10	
			1,755,763 26
Miscellaneous—			
Bankruptcy Act—Administration		1,213 43	
Canadian Law Library, London, England		357 80	
Expenses of litigated matters conducted within the Department of Justice		40,326 68	
Judicial Committee of the Privy Council		2,000 00	
Pecuniary Claims Convention with the U.S.A.		954 11	
Dominion Statutes—Revision		19,994 95	
Awards to the United States Government by the Pecuniary Claims Convention—			
The "Tattler" claim	630 00		
The "Gerring Jr." claim	9,000 00		
		9,630 00	
Gratuities		8,833 32	
Flat increase in salary		49,910 41	
			133,220 70
			4,385,419 75
SCHEDULE No. 7			
Labour—			
Civil Government—Salaries	204,368 04		
Contingencies	24,985 77		
		229,353 81	
Act respecting Annuities for Old Age (Administration)	40,000 00		
Combines Investigation Act	22,257 11		
Conciliation and Labour Act	40,000 00		
Employment Offices Co-ordination Act (administration)	15,018 85		
Employment Offices Co-ordination Act (under statute)	150,000 00		
Fair Wages and Inspection Officers	8,000 00		
Industrial Disputes Investigation Act	20,000 00		
International Labour Conference	11,343 40		
Joint Industrial Councils	3,000 00		
Old Age Pension Act—Statutory	131,452 01		
Technical Education Act (administration)	4,000 00		
Technical Education Act (under statute)	965,955 32		
		1,411,026 69	
Miscellaneous—			
Flat increase in salary		240 00	
			1,640,620 50
SCHEDULE No. 8			
Legislation—			
Senate	458,451 80		
House of Commons	1,383,946 84		
Library—Salaries	42,985 00		
Contingencies	9,044 63		
Books for General Library	17,422 97		
Books for Library of American History	876 76		
Printing Reports	892 97		
Carried forward	1,913,620 97		

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	1,913,620 97		
SCHEDULE No. 8—*Concluded*			
Legislation—Concluded			
Printing of Parliament	82,086 38		
Elections	45,484 83		
		2,041,192 18	
Miscellaneous—			
Chief Electoral Officer, salary	7,500 00		
Office of the Chief Electoral Officer	8,081 19		
Publications of the League of Nations for distribution to Members of Parliament	375 00		
Gratuities	1,336 66		
Flat increase in salary	2,240 00		
		19,532 85	
			2,060,725 03
SCHEDULE No. 9			
Marine and Fisheries—			
Civil Government—Salaries	506,831 92		
Contingencies: Marine Branch	53,641 79		
Contingencies: Fisheries Branch	27,795 77		
		588,269 48	
Ocean and River Service—			
Dominion Steamers and Icebreakers	1,625,501 41		
Establishment of a Patrol Service to investigate conditions of Navigation in Hudson Strait and Hudson Bay	1,021,512 65		
Examination of Masters and Mates	19,303 41		
Hydrographic, Tidal and Current Survey	310,699 01		
Inspection of live stock shipments	3,709 42		
International Radio Conference at Washington, D.C., and the meeting of delegates of Great Britain and the Dominions at Ottawa prior to the International Convention	7,432 58		
Investigation into Wrecks	5,748 62		
Life Saving Service	62,918 72		
Radio Service—General improvement of reception conditions to licensed broadcast listeners	154,543 19		
Radiotelegraph Service	475,204 16		
Registration of shipping	2,572 76		
Relief of distressed seamen	400 14		
Removal of obstructions in navigable waters	1,770 96		
Schools of Navigation	7,288 09		
Subsidies for wrecking plants	45,000 00		
Miscellaneous and unforeseen expenses	5,500 00		
		3,749,105 12	
Lighthouse and Coast Service—			
Administration of Pilotage	121,744 10		
Agencies, rents and contingencies	210,047 90		
Allowance to Harbour Master at Amherstburg	600 00		
Breaking ice in Thunder Bay, Lake Superior and other points	30,000 00		
Compassionate allowance to John Davidson	500 00		
Construction of lights and aids to navigation, etc	597,633 11		
Construction of lights, etc—Converting "Trawler No. 15" into a buoy steamer to replace the "*Brant*"	94,967 59		
Exchequer Court Award in the appeal "Canada Steamships Lines, Limited," and the Travellers Insurance Company *re* injuries sustained as a result of the collapse of the slip at L'Anse Tadoussac	24,270 17		
Maintenance and repairs to lighthouses	893,182 43		
Maintenance and repairs to wharves	6,572 24		
Pensions to retired pilots	10,575 00		
Salaries and allowances to lightkeepers	676,079 80		
Salaries and allowances to lightkeepers—To reinstate William R. Wallace at Hope Island, Ontario	1,920 00		
Signal Service	102,938 37		
		2,771,030 71	
Carried forward		7,108,405 31	

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	.....	7,108,405 31	
SCHEDULE No. 9—*Concluded*			
Marine and Fisheries—Concluded			
Fisheries—			
Building fishways and clearing rivers	14,319 06		
Conservation and development of deep sea fisheries. and the demand for fish	129,878 91		
Fish culture	349,141 63		
Fisheries Intelligence Bureau	561 57		
Fisheries Patrol and Fisheries Protection Service	900,316 11		
Fishing Bounty	158,375 80		
Inspection of canned and pickled fish	24,894 85		
Investigation into the life history of the Pacific halibut.	31,652 54		
Legal and incidental expenses	4,006 17		
Marine Biological Board of Canada	138,000 00		
		1,751,146 64	
Scientific Institutions—			
Meteorological Service	.....	270,276 31	
Steamboat Inspection	.....	131,065 31	
Miscellaneous—			
Compassionate allowance to the widow of the late Frank Askew	2,000 00		
Compensation to the owner of a lighthouse site on Long Pilgrim Island, Que.	255 60		
Compassionate allowance to Onesime Plante	2,500 00		
Gratuities	6,837 23		
Flat increase in salary	100,972 07		
Unforeseen expenses	1,673 46		
		114,238 36	
			9,375,131 93
SCHEDULE No. 10			
Mines—			
Civil Government—Salaries	.....	554,370 51	
Contingencies	.....	5,172 40	
			559,542 91
Geological Survey—			
Explorations, surveys and investigations	189,669 30		
Publication of reports, etc.	47,868 66		
Maintenance of Offices and Museum, etc.	53,141 46		
Museum equipment	15,000 00		
Purchase of specimens	1,925 76		
		307,605 18	
Mines Branch—			
Compensation to J. H. Fortune, caretaker of Mines Branch Building	400 00		
Investigation of mineral resources, ore deposits, etc.	178,686 91		
Operation of Peat Bog at Alfred, Ontario	64,128 80		
Organization and equipment of Explosives Division	9,912 00		
Publication of reports, etc.	39,987 33		
Dominion of Canada Assay Office—Maintenance	23,463 83		
		316,578 87	
			624,184 05
Miscellaneous—			
Canadian Institute of Mining and Metallurgy	.....	3,000 00	
Imperial Institute	.....	12,848 00	
Compassionate allowance to Mrs. Nancy Waugh	.....	3,000 00	
Gratuities	.....	168 88	
			19,016 88
			1,202,743 84

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 11			
National Defence—			
Civil Government—Salaries		703,966 00	
Contingencies		69,992 17	
			773,958 17
Militia Services—			
Administration	306,294 16		
Aid to Civil Power	1,928 52		
Cadet Services	498,300 94		
Contingencies	23,832 28		
Engineer Services and Works	802,989 09		
General Stores	607,721 71		
Manufacturing Establishments	469,632 04		
Non-Permanent Active Militia	2,078,256 34		
Permanent Force	4,797,577 91		
Royal Military College	363,412 59		
Topographic Survey	39,993 91		
Transport and Freight	163,963 69		
		10,153,903 18	
Naval Service—			
Maintenance		1,702,225 09	
Air Services—			
Royal Canadian Air Force—Maintenance, operation and training	1,669,638 84		
Civil Air Operations—Flying operations for other Government Departments, control of civil aviation and establishment of air routes, airship bases, etc.	2,222,222 12		
		3,891,860 96	
General Services—			
Civil pensions	1,467 92		
Construction of magazine, Halifax	100,000 00		
Compassionate grant to B. D. Marwick, Principal of the Kemptville High School, for injuries received while officiating as Cadet Instructor	350 00		
Memorial to citizens and residents of the United States who enlisted in the Canadian Forces and lost their lives in the late war	9,166 24		
Repairs to part of the outside wall at the Citadel, Quebec	5,215 00		
		116,199 16	
			15,864,188 39
Government of the Northwest Territories—			
Mackenzie Basin System—Radio Services			142,736 48
Miscellaneous—			
Battlefields Memorials		183,067 12	
Imperial War Graves Commission		573,419 48	
Gratuities		1,680 00	
Flat increase in salary		35,628 64	
Unforeseen expenses		84,959 96	
			878,755 20
			17,659,638 24
SCHEDULE No. 12			
National Revenue—			
Civil Government—Salaries	602,704 56		
Contingencies	27,425 73		
		630,130 29	
Salaries and Contingencies	6,919,181 00		
Inspectors, preventive service and Board of Customs	949,758 07		
Maintenance of revenue cruisers and preventive service	383,088 45		
Miscellaneous	599,968 13		
Secret preventive service	33,260 87		
Special Preventive Service	1,048,433 03		
Administration of the Business Profits War Tax Act, 1916, and the Income War Tax Act, 1917, and amendments	1,865,923 02		
Exchequer Court Award *re* Customs Seizures, Henri Girardin and Paul Arnaud	218 60		
Carried forward	11,799,831 17	630,130 29	

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	11,799,831 17	630,130 29	
SCHEDULE No. 12—*Concluded*			
National Revenue—Concluded			
Compassionate allowances to—			
Mrs. Charles E. McDonald	500 00		
Mrs. W. J. Irwin	500 00		
Joseph Laurent Doiron	500 00		
		11,801,331 17	
Miscellaneous—			
Payment to E. D. Lennie, Acting Collector of Customs and Excise at Montreal	1,200 00		
Gratuities	21,389 96		
Flat increase in salary	137,663 47		
		160,253 43	
			12,591,714 89
SCHEDULE No. 13			
Pensions—			
Judges		205,702 01	
Militiamen, Rebellion of 1885 and generally		30,689 52	
Militia Pensions Act of 1901		759,175 43	
Pensions payable to Mounted Police, Prince Albert Volunteers and Police Scouts on account of the Rebellion of 1885		973 56	
Annuity to the Right Honourable W. S. Fielding		10,000 00	
Annuity to Dr. F. G. Banting		6,875 00	
Annuity to Dr. Charles E. Saunders		5,000 00	
Annuity to Robinson Russell Farrow		9,319 53	
Annuity to Dougald Carmichael		499 92	
Civil Flying		240 00	
European War and Active Militia		38,460,658 72	
Salaries of Board of Pension Commissioners		18,999 96	
Board of Pension Commissioners for Canada—Salaries and Contingencies		81,834 51	
Salaries—Chairman and four members of the Federal Appeal Board		31,000 00	
Mounted Police (Statutory)		142,811 90	
Pensions to families of members of the Force who lost their lives whilst on duty		3,526 79	
Pensions to—			
J. B. Allan		524 17	
The unmarried sister of the late Col. Harry Baker, M.P		699 88	
J. Langlois Bell		600 00	
Captain J. E. Bernier		2,400 00	
James Elliott		672 00	
Mrs. Jean Laird Farrell		600 00	
Mrs. Violet L. Jenkin		600 00	
Mrs. Alice Joynson		499 92	
Mrs. Letitia Kennedy		847 00	
Mrs. Caroline Elizabeth McIllree		979 68	
Mrs. Wm. McDougall		1,200 00	
Alice Morson Smith		600 00	
Mrs. Beatrice Williams		600 00	
			39,778,129 50
SCHEDULE No. 14			
Post Office—			
Civil Government—Salaries	1,250,419 00		
Contingencies	156,134 39		
		1,406,553 39	
Salaries and Allowances	15,914,370 31		
Mail Service	14,601,163 30		
Miscellaneous	1,133,968 85		
Yukon Territory	133,465 99		
		31,782,968 45	
Miscellaneous—			
Gratuities	13,656 67		
Flat increase in salary	620,383 21		
		634,039 88	
			33,823,561 72

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 15			
Public Works—			
Civil Government—Salaries	650,078 95		
Contingencies	62,885 19		
		712,964 14	
Construction, Maintenance, Repairs, etc. (Appendix No. 11)—			
Public Buildings	7,355,382 64		
Harbours and Rivers	3,679,995 87		
Dredging	1,337,832 72		
Roads and Bridges	37,173 05		
Telegraph and Telephone Lines	113,541 41		
Miscellaneous	924,518 50		
Subsidies to Dry Docks	588,921 34		
		14,037,365 53	
Collection of Revenue (Appendix No. 11)—			
Sundry Works	216,774 83		
Telegraph and Telephone Lines	725,769 25		
		942,544 08	
Miscellaneous—			
International Joint Commission	33,631 42		
Gratuities	7,511 47		
Flat increase in salary	60,248 43		
Unforeseen expenses	7,325 62		
		108,716 94	
			15,801,590 69
SCHEDULE No. 16			
Railways and Canals—			
Civil Government—Salaries	.....	260,410 00	
Contingencies	.....	35,498 11	
			295,908 11
Chargeable to Income—			
Canals—			
Bakers Dam—Improvements	27,648 56		
Lachine—Improvements	19,085 85		
Port Colborne Elevator—Improvements	11,525 60		
Sault Ste. Marie—Compassionate allowance to the widow of the late William H. Tilley	1,000 00		
St. Anne's Lock—Improvements	5,984 18		
St. Peters—Improvements	421 16		
Trent—Improvements	166,526 12		
Welland—Improvements	70,128 98		
Welland—Compassionate allowance to Stanley Sleck, minor son of Mrs. Marcella Sleck, who was injured on a Welland Canal bridge	1,000 00		
Surveys and Inspections—Canals	7,623 02		
Exchequer Court award *re* upper entrance to Rapide Plat Canal	5,407 06		
		316,350 53	
Railways—			
Board of Railway Commissioners for Canada—			
Salaries—Statutory	49,564 52		
Maintenance and Operation	278,440 00		
Adjustment of allowance of pay for Railway and Canal employees while they were on service in the Canadian Expeditionary Force during the Great War	13,643 98		
Governor General's Cars—Repairs, etc	2,905 11		
Supplement to Pension allowance payable under the provisions of the Intercolonial and Prince Edward Island Railway Employees' Provident Fund	38,398 47		
		382,952 08	
Maritime Freight Rates Act, 1927—			
Canadian National Railway Company, deficit in receipts and revenues of the Eastern Lines, July 1st to December 31, 1927—			
Due to application of the Maritime Freight Rates Act	931,809 89		
Deficit in excess of that occurring on account of the application of the Maritime Freight Rates Act	2,117,936 42		
Other Railway Companies—			
Difference between Tariff Tolls and Normal Tolls, referred to in Sec. 9 of the Maritime Freight Rates Act, for the period July 1st. to December 31, 1927	421,654 56		
		3,471,400 87	
Carried forward	.....	4,170,702 48	295,908 11

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		4,170,703 48	295,908 11
SCHEDULE No. 16—*Concluded*			
Railways and Canals—Concluded			
Miscellaneous—			
Canada Highways Act, 1919, and amendments	1,224,395 75		
Commissioner of Highways—Organization and Payment of Staff	17,064 78		
Printing and Stationery	4,401 94		
Pension to J. L. Weller	3,500 00		
Workmen's Compensation Act	378,387 36		
Miscellaneous services, including salaries and expenses of experts employed temporarily	39,692 14		
		1,667,441 97	
			5,838,145 45
Chargeable to Collection of Revenue—			
Canals—			
Staff and Repairs		2,533,520 84	
Exchequer Court Award *re* costs in case of Sincennes—McNaughton Line, Limited, *vs.* the King in connection with the breaking of Lock No. 1 on the Lachine Canal		1,839 94	
			2,535,360 78
Miscellaneous—			
St. Lawrence Ship Canal surveys and investigations including the Canadian National Advisory Council		63,200 53	
Gratuities		4,492 82	
Flat increase in salary		3,770 33	
			71,463 68
			8,740,878 02
SCHEDULE No. 17			
Royal Canadian Mounted Police—			
Civil Government—Salaries	44,440 00		
Contingencies	4,430 25		
		48,870 25	
Pay of Force	1,028,227 80		
Subsistance, billeting and travelling expenses, forage, fuel, light, etc	1,178,843 87		
Compensation to members of the Force for injuries received whilst in the performance of duty	7,486 43		
Enforcement of Federal Statutes	52,738 72		
Special services *re* enforcement of the Opium and Narcotic Drug Act	33,141 86		
		2,300,438 68	
Miscellaneous—			
Grant to the Chief Constables Association of Canada		500 00	
			2,349,808 93
SCHEDULE No. 18			
Soldiers' Civil Re-establishment—			
Civil Government—Salaries		29,995 49	
Care of patients and medical examination of pensioners	2,092,339 48		
Employers' Liability Compensation	71,694 88		
Federal Appeal Board and District Boards of Review	127,543 21		
Interest on Funds	20,710 15		
Operating expenses and working capital	217,174 23		
Pay and allowances	1,176,973 76		
Salaries—Administrative, clerical, dental, technical, etc.	2,688,384 50		
Sheltered employment	132,835 79		
Unemployment relief	430,479 91		
Vocational loans	675 06		
		6,958,810 97	
Miscellaneous—			
Gratuities		2,212 40	
			6,991,018 86

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 19			
Soldier and General Land Settlement—			
Expenses of administration of Soldier and General Land Settlement	.....	1,334,007 55	
Miscellaneous—			
Flat increase in salary	.....	52,438 11	
			1,386,445 66
SCHEDULE No. 20			
Trade and Commerce—			
Civil Government—Salaries	.....	596,984 47	
Contingencies	.....	36,981 18	
			633,965 65
British and Foreign News Service	32,000 00		
British Government scheme for the marketing of Empire produce	30,952 26		
Canada Grain Act—administration	1,648,562 37		
Canadian Government Motion Picture Bureau	34,994 39		
Commercial Intelligence Service	413,294 31		
Construction of a Grain Elevator at Halifax	188,722 59		
Copper Bounties Act—administration	329 00		
Dominion Bureau of Statistics	163,656 50		
Elevators—Management, operation and maintenance	443,046 92		
Elevators—Equipment	17,138 14		
Electricity and Fluid Exportation Act—administration	440 59		
Gas and Electricity Inspection	192,298 84		
Gold and Silver Marking Act—administration	4,967 78		
Honorary Advisory Council for Industrial and Scientific Research	169,998 41		
International Customs Tariffs Bureau	660 00		
International Office for the Protection of Industrial Property and the International Copyright Union Office	1,715 07		
Printing of Parliamentary and Departmental Publications	117,995 51		
Publicity and Advertising—Salaries and expenses	49,989 60		
Prince Rupert Elevator site	165,000 00		
Patent Record	34,005 98		
Weights and Measures Inspection	306,194 55		
Roofing materials for Isle of Pines, Cuba	22 29		
		4,015,985 10	
Bounties—			
Copper Bars	79,819 16		
Hemp	2,987 70		
		82,806 86	
			4,098,791 96
Mail Subsidies and *Steamship Subventions—*			
Atlantic Ocean—			
Canada and South Africa	.....	99,999 96	
Pacific Ocean—			
Canada and New Zealand	100,000 00		
Prince Rupert, B.C., and Queen Charlotte Islands	21,000 00		
Victoria, Vancouver, wayports and Skagway	24,107 14		
Victoria and West Coast Vancouver Island	15,000 00		
Vancouver and Northern Ports of British Columbia	24,800 00		
Vancouver and Ports on Howe Sound	5,000 00		
Vancouver and the British West Indies	24,000 00		
		213,907 14	
Local Services—			
Baddeck and Iona	10,500 00		
Charlottetown and Pictou	35,000 00		
Charlottetown, Victoria and Halliday's Wharf	5,000 00		
Dalhousie, N.B., and Carleton, Que	3,000 00		
Grand Manan and the Mainland	20,000 00		
Halifax and Bay St. Lawrence	2,400 00		
Halifax, Canso and Guysboro	9,000 00		
Halifax, La Have and La Have River Ports	5,596 15		
Carried forward	90,496 15	313,907 10	4,732,757 61

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	90,496 15	313,907 10	4,732,757 61
SCHEDULE No. 20—*Concluded*			
Trade and Commerce—Concluded			
Mail Subsidies and Steamship Subventions—Concluded			
Local Services—Concluded			
Halifax, Spry Bay and Cape Breton Ports	6,000 00		
Halifax, South Cape Breton and Bras d'Or Lake Ports	5,000 00		
Halifax and West Coast Cape Breton	6,000 00		
Mainland and Islands of Miscou and Shippegan	2,000 00		
Mulgrave, Arichat, and Petit de Grat	13,000 00		
Mulgrave and Canso	27,400 00		
Mulgrave and Guysboro	14,000 00		
Newcastle, Neguac and Escuminac	4,500 00		
Parrsboro, Kingsport and Wolfville	5,000 00		
Pelee Island and the Mainland	10,999 98		
Pictou, Mulgrave and Cheticamp	11,000 00		
Pictou, Souris and the Magdalen Islands	50,000 00		
Port Mulgrave, St. Peters, Irish Cove and Marble Mountain and other ports on the Bras d'Or Lakes	10,350 00		
Quebec, Natashquan and Harrington and other ports on the North Shore of the Gulf of St. Lawrence	85,000 00		
Quebec or Montreal and Gaspe and Ports on the South Shore of the Gulf of St. Lawrence	60,000 00		
Rimouski and Pointe aux Outardes	7,500 00		
Rivière du Loup and Tadoussac and other north shore ports	13,021 00		
St. Catherine's Bay and Tadoussac	3,500 00		
St. John and Bear River and other way ports	2,000 00		
St. John and Bridgetown	1,000 00		
St. John and Digby	15,000 00		
St. John and St. Andrews calling at intermediate points	4,000 00		
St. John, Digby, Annapolis and Granville, along the west coast of Annapolis Basin	2,000 00		
St. John, Margaretville and other ports on the Bay of Fundy	3,500 00		
St. John and Minas Basin Ports	5,000 00		
St. John, Westport and Yarmouth and other way ports	15,000 00		
St. John and Weymouth	1,500 00		
Summerville, Burlington and Windsor, N.S.	466 66		
Sydney and Bras d'Or Lake Ports and Ports on the west coast of Cape Breton	18,000 00		
Sydney and Bay St. Lawrence, calling at way ports	18,000 00		
Sydney and Whycocomagh	13,000 00		
Grant to the Province of British Columbia for the improvement of the Mail Service on inland waters in that Province	3,000 00		
Inspection of subsidized steamship services	4,449 87		
		530,683 66	
			844,590 76
Miscellaneous—			
Gratuities	.....	5,790 00	
Flat increase in salary	.....	100,478 92	
			106,268 92
			5,683,617 29
SCHEDULE No. 21			
Other Departments—			
Archives—			
Civil Government—Salaries	66,515 06		
Contingencies	24,796 78		
		91,311 84	
Miscellaneous—			
Public Archives	89,926 59		
Purchase of Photostat Machine, Dryer Press, Trimmer and Sliding Bookholder	3,000 00		
Early French Colonial Exhibition in Paris	1,819 45		
Flat increase in salary	4,080 00		
		98,826 04	
			190,137 88
Carried forward	.....	.....	190,137 88

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward			190,137 88
SCHEDULE No. 21—*Continued*			
Other Departments—Continued			
Auditor General's Office—			
Civil Government—Salaries	332,814 71		
Contingencies	32,387 68		
		365,202 39	
Miscellaneous—			
Gratuities		120 00	
			365,322 39
Civil Service Commission—			
Civil Government—Salaries	217,535 00		
Contingencies	62,696 92		
		280,231 92	
Miscellaneous—			
Gratuities	500 00		
Flat increase in salary	5,695 86		
		6,195 86	
			286,427 78
External Affairs—			
Civil Government—Salaries	108,328 47		
Contingencies	30,470 35		
		138,798 82	
Miscellaneous—			
Canadian Delegation to the League of Nations	14,531 15		
Canadian Representation in the U.S.A.	99,258 76		
Canadian Representation at Geneva	11,971 89		
Paris Agency	44,242 37		
Passport Office	22,893 12		
Permanent Secretariat of the League of Nations	150,777 13		
Representation of Canada at the official opening of Canberra as the seat of Government of the Commonwealth of Australia	7,429 27		
International Economic Conference at Geneva	4,577 94		
Flat increase in salary	228 87		
Unforeseen expenses	20,297 62		
		376,208 12	
			515,006 94
Government Contracts Supervision Committee—			
Miscellaneous—			
Salaries and Contingencies			19,526 31
Health—			
Civil Government—Salaries	172,007 73		
Contingencies	59,657 11		
		231,664 84	
Administration of the Acts respecting Food and Drugs, Maple Products, Opium and Narcotic Drugs and Proprietary or Patent Medicines	120,799 92		
Immigration Medical Inspection	149,396 32		
Laboratory of Hygiene	3,763 50		
Marine Hospitals	189,969 80		
Quarantine	199,860 75		
Pollution of Inland Waters	8,786 57		
Venereal Diseases	98,858 11		
		771,434 97	
Miscellaneous—			
Canadian Social Hygiene Council	10,000 00		
Child Welfare Association	5,000 00		
Canadian National Committee for Mental Hygiene	10,000 00		
Canadian Tuberculosis Association	25,000 00		
Canadian Dental Hygiene Council	5,000 00		
Gratuities	1,796 66		
		56,796 66	
			1,059,896 47
Carried forward			2,436,317 77

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward			2,436,317 77
SCHEDULE No. 21—*Concluded*			
Other Departments—Concluded			
High Commissioner's Office—			
Civil Government—Salaries		50,500 00	
Contingencies		63,056 78	
Insurance—			113,556 78
Civil Government—Salaries	83,080 00		
Contingencies	57,814 85		
		140,894 85	
Miscellaneous—			
Expenses of Technical investigation re roof coverings	3,192 56		
Expenses of work in the interest of fire prevention	9,750 33		
Gratuities	270 00		
Flat increase in salary	141 67		
		13,354 56	
Office of the Secretary to the Governor General—			154,249 41
Civil Government—Salary: The Governor General	48,666 66		
Salaries: Office of the Secretary to the Governor General	34,115 00		
Contingencies	70,658 34		
		153,440 00	
Miscellaneous—			
Flat increase in salary	780 00		
Unforeseen expenses	1,500 00		
		2,280 00	
			155,720 00
Printing and Stationery—			
Civil Government—Salaries	77,562 33		
Contingencies	13,496 95		
		91,059 28	
Canada Gazette	30,706 34		
Distribution of Parliamentary Documents	48,473 52		
Plant—new	34,051 50		
Plant repairs and renewals	29,260 48		
Printing, binding, etc., the Annual Statutes	8,938 67		
Printing and binding Government Publications for sale and distribution to Departments and the Public	33,713 95		
Printing, binding and distributing the Revised Statutes of Canada, 1927	96,265 32		
Printing, binding and distributing the Revised Edition of the Criminal Code, 1927	14,905 88		
		296,315 66	
Miscellaneous—			
Gratuities	1,041 34		
Flat increase in salary	2,340 00		
		3,381 34	
Privy Council—			390,756 28
Civil Government—Salaries	48,385 00		
Contingencies	4,600 03		
		52,985 03	
Miscellaneous—			
Gratuities	216 66		
Flat increase in salary	250 50		
Unforeseen expenses	9,675 99		
		10,143 15	
			63,128 18
Secretary of State—			
Civil Government—Salaries	208,625 21		
Contingencies	38,697 59		
		247,322 80	
Miscellaneous—			
Expenses under the Naturalization Acts	13,914 66		
Expenses under the Canada Temperance Act	328 73		
Gratuities	633 33		
Flat increase in salary	10 00		
		14,886 72	
			262,209 52
			3,575,937 94

SCHEDULES OF ORDINARY EXPENDITURE, 1927-28—*Concluded*

—	$ cts.	$ cts.	$ cts.
SCHEDULE No. 22			
Miscellaneous—			
Grants and Contributions to the—			
Canadian Branch of the St. John Ambulance Association	5,000 00		
Canadian General Council of the Boy Scouts Association	15,000 00		
Canadian National Institute for the Blind	10,000 00		
Canadian National Safety League	10,000 00		
Canadian Olympic Team	26,000 00		
Corporation of the City of Ottawa	100,000 00		
Dominion Council of the Girl Guides	3,000 00		
Interparliamentary Union for Peace	200 00		
Montreal Association for the Blind	5,000 00		
National Battlefields Commission	75,000 00		
Federal District Commission	225,000 00		
Royal Astronomical Society	2,000 00		
Royal Canadian Academy of Arts	2,500 00		
Royal Society of Canada	6,000 00		
Victorian Order of Nurses	10,000 00		
		494,700 00	
Empire Parliamentary Association—Subscription to publications	.....	2,000 00	
Expenses incidental to the celebration of the sixtieth anniversary of Confederation	.....	250,000 00	
Expenses of Advisers re Tariff Enquiry	.....	71,999 63	
Dominion Provincial Conference	.....	15,396 67	
Grants, pending consideration of Provincial Subsidies, to the Provinces of—			
Nova Scotia	875,000 00		
New Brunswick	600,000 00		
Prince Edward Island	125,000 00		
		1,600,000 00	
Negotiation of Treaties	.....	6,620 93	
Inquiry into the Customs Department	.....	139,269 14	
Clarkson, Gordon and Dilworth for work in connection with the reorganization of the Department of Customs and Excise	.....	41,446 16	
Payment to the City of Regina out of the purchase price of Dominion Park in that city	.....	78,706 63	
Salary of Hon. J. C. Patterson, Commissioner to investigate titles of Great Britain to lands in the Arctic Seas	.....	2,400 00	
			2,702,539 16

SCHEDULES OF SPECIAL EXPENDITURE, 1927-28

SCHEDULE No. 23	$ cts.	$ cts.	$ cts.
Adjustment of War Claims—			
National Defence—			
Militia Services	132,630 05		
Militia Service–Interest due British Ministry of shipping	1,704,715 14		
		1,837,345 19	
Naval Service	.....	2,110 70	
			1,839,455 89
Secretary of State	.....	.....	21,529 36
			1,860,985 25
SCHEDULE No. 24			
Cost of Loan Flotations—			
5½% Victory Loan 1917, redemption 1927—			
Clerical assistance	3,710 00		
Express	7 00		
Printing	115 14		
		3,832 14	
Commission of $\frac{1}{16}$ of one per cent paid to Banks for redemption of matured bonds—			
5½% Victory Loan 1917, due 1922	14 79		
5½% Victory Loan 1918, due 1923	31 65		
5½% Victory Loan 1919, due 1924	49 27		
5½% War Loan 1915, due 1925	67 46		
		163 17	
Carried forward	.....	3,995 31	

SCHEDULES OF SPECIAL EXPENDITURE, 1927-28—*Concluded*

—	$ cts.	$ cts.	$ cts.
Brought forward		3,995 31	
SCHEDULE No. 24—Concluded.			
Cost of Loan Flotations—Concluded—			
5½% Renewal Loan 1922—Redemption 1927—			
Clerical assistance	1,562 98		
Express	16 00		
Printing	860 11		
		2,439 09	
4% Three year Treasury Notes 1927-30—			
Printing Notes, Canadian Bank Note Co., Ltd., Ottawa Ont.	2,891 20		
Insurance	2,161 62		
		5,052 82	
5% Public Service Loan, New York—			
1-32 of one per cent commission paid to the Bank of Montreal, New-York for redemption of bonds due April 1, 1926		3 13	
4% One year Notes, New-York ($70,000,000 Notes due Sept. 1, 1926, called April 1, 1926)—			
Printing—Canadian Bank Note Co., Ltd., Ottawa, Ont.		930 79	
4% one, two and three year notes ($24,000,000)—			
1-32 of one per cent commission paid to Bank of Montreal, New-York, for redemption of three year Notes due Nov. 15, 1927		636 56	
			13,057 70
SCHEDULE No. 25			
Miscellaneous Charges—			
Home Bank Depositors Relief Act, 15-16 Geo. V, Chap. 45		205,032 55	
Civil Service Superannuation Act, 1924, Chap. 24, R.S. 1927 (Government contribution to the Fund)		1,402,210 32	
Contributions of W. C. Acker to Superannuation Fund, No. 1, from April 1, 1890, to September 30, 1905, together with interest thereon at 4 per cent, transferred to Civil Service Superannuation Act, 1924, O.C. 129/2275 November 28, 1927		268 99	
Advance made to O. M. Biggar for expenses in connection with arguing the Appeal before the Privy Council, in the case of Macdonald and Canadian National Railways and Luscar Collieres, Limited		1,000 00	
The Honourable Provincial Treasurer of British Columbia, on account of head taxes collected upon Chinese during the fiscal year 1923-24		19,414 00	
Soldier Settlement Board—Amount written off loans to Soldier Settlers for purchase of live stock as provided for by Chapter 53 of the Statutes of 1925		3,240 16	
Soldier Settlement Board—Amount written off Loans to Soldier Settlers for purchase of land as provided for by Chapter 68 of the Statutes of 1927		61,087 75	
			1,692,253 77

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1926-27 AND 1927-28

—	1926-27		1927-28	
	$ cts.	$ cts.	$ cts.	$ cts.
SCHEDULE No. 26				
National Revenue—				
Customs Import Duties—				
Alberta	3,536,500 07	.....	4,203,993 74	
British Columbia	15,943,964 48	.....	16,314,143 18	
Manitoba	9,096,992 97	.....	9,437,559 55	
New Brunswick	5,824,483 54	.....	4,004,245 19	
Nova Scotia	3,311,671 03	.....	3,514,903 81	
Ontario	75,201,220 93	.....	85,960,295 36	
Prince Edward Island	162,677 75	.....	186,619 58	
Quebec	42,700,538 07	.....	44,528,477 87	
Saskatchewan	3,088,802 28	.....	3,627,712 60	
Yukon	90,914 17	.....	82,551 67	
Department of National Revenue	.....	.....	8 75	
British P. O. Parcels	8,603 25	.....	8,447 46	
	158,966,368 54	.....	171,868,958 76	
LESS—Returned duties and drawbacks	16,997,690 90		14,883,141 11	
		141,968,677 64		156,985,817 65
Excise Duties—				
Alberta	636,082 12	.....	652,506 31	
British Columbia	1,711,581 42	.....	1,935,809 28	
Manitoba	828,788 71	.....	819,200 30	
New Brunswick	168,562 19	.....	250,108 02	
Nova Scotia	33,931 31	.....	37,298 22	
Ontario	11,272,035 85	.....	15,142,798 91	
Prince Edward Island	37,447 16	.....	38,558 96	
Quebec	33,860,483 32	.....	38,617,252 40	
Saskatchewan	584,605 15	.....	566,944 22	
Yukon Territory	5,287 26	.....	1,608 75	
	49,138,804 49	.....	58,062,085 37	
LESS—Refunds	625,644 05		661,187 91	
		48,513,160 44		57,400,897 46
Sales Tax, Tax on Cheques, Transportation Tax, etc.—				
Sales	82,305,670 60	.....	72,100,244 12	
Manufactures	12,602,565 77	.....	12,108,798 19	
Stamps, including cheques embossed	9,325,276 18	.....	4,735,439 59	
Transportation	2,452,779 52	.....	2,534,981 78	
Licenses, penalties and interest	37,036 00	.....	182,622 06	
	106,723,328 07	.....	91,662,085 74	
LESS—Refunds, etc	1,110,168 07		1,439,154 42	
		105,613,160 00		90,222,931 32
Taxation Branch—				
Income Tax	47,386,309 22	.....	56,571,047 39	
Business Profits Tax	710,102 19	.....	956,031 44	
Trust and Loan Companies	335,367 65	.....	345,429 85	
		48,431,779 06		57,872,508 68
Sundry Collections—				
Casual Revenue (Appendix No. 14)	409,242 60	.....	430,303 42	
Fines and Forfeitures (Appendix No. 15)	305,899 97	.....	423,843 94	
Premium, Discount and Exchange	47 30	.....	21 54	
		715,189 87		854,168 90
		345,241,967 01		363,336,324 01
SCHEDULE No. 27				
Finance—				
Chartered Banks	.....	1,174,664 95	.....	1,224,644 46
Insurance Companies	.....	947,829 95	.....	999,003 34
Interest on Investments (Appendix No. 13)—				
Interest on Sinking Funds	1,535,522 66	.....	1,660,992 47	
Loans to Banks	368,614 75	.....	524,202 29	
Loans to Provinces	1,171,479 40	.....	1,054,277 25	
Advances to Foreign Governments	1,572,271 80	.....	1,640,320 52	
Carried forward	4,647,888 61	2,122,494 90	4,879,792 53	2,223,647 80

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1926-27 AND 1927-28—*Continued*

—	1926-27		1927-28	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward	4,647,888 61	2,122,494 90	4,879,792 53	2,223,647 80
SCHEDULE No. 27—*Concluded*				
Finance—Concluded—				
Interest on Investments—Concluded				
Canadian Government Merchant Marine	30,426 61	.....	12,599 92	
Montreal Harbour Debentures	908,931 34	.....	2,849,604 65	
Vancouver Harbour Debentures	681,245 76	.....	723,331 97	
Seed Grain and Relief Advances	113,245 88	.....	119,741 85	
Soldier Land Settlement Advances	1,889,443 77	.....	2,069,623 01	
Miscellaneous	288,219 15		283,128 45	
		8,559,401 12		10,937,822 38
Sundry Collections—				
Casual Revenue (Appendix No. 14)	227,263 68	.....	451,902 24	
Fines and Forfeitures (Appendix No. 15)	5,098 90	.....	625 00	
Premium, Discount and Exchange	644,490 66		593,752 57	
		876,853 24		1,046,279 81
		11,558,749 26		14,207,749 99
SCHEDULE No. 28				
Interior—				
Dominion Lands—				
Canadian National Parks	238,078 04	.....	275,229 34	
Coal Lands	414,843 90	.....	415,532 65	
Export Tax on Gold	12,437 64	.....	14,205 55	
Forestry Branch, sale of trees, etc	17,674 69	.....	18,687 62	
Fur sales	11,625 67	.....	22,271 00	
General sales	45,991 92	.....	91,381 39	
Grazing lands rentals, fees and improvements	171,344 04	.....	174,279 92	
Hay permits	14,623 26	.....	13,449 04	
Homestead fees	57,700 00	.....	72,551 00	
Improvements	44,162 20	.....	46,736 39	
Irrigation sales	15,989 89	.....	11,031 70	
Map sales, office fees, etc	28,774 45	.....	34,467 59	
Mining fees	87,090 41	.....	127,580 00	
Petroleum	478,150 45	.....	298,445 99	
Pre-emption sales under Act of 1908	457,225 98	.....	597,250 13	
Purchased homestead sales	25,614 15	.....	32,660 54	
Rent of water power	31,336 41	.....	50,417 00	
Rentals of land	17,239 08	.....	18,939 05	
Stone quarries	6,130 04	.....	7,400 27	
Timber dues	1,190,974 61	.....	1,388,140 48	
Trappers and Traders licenses	21,651 00	.....	19,427 00	
Suspense Account	1,111 98	.....	2,888 07	
Miscellaneous	28,784 14	.....	29,956 84	
	3,418,553 95	.....	3,762,928 56	
LESS—Refunds	91,280 73		74,333 97	
		3,327,273 22		3,688,594 59
Ordnance Lands	.....	29,702 44	.....	14,205 88
Casual Revenue (Appendix No. 14)	.....	42,351 46	.....	12,246 08
Fines and Forfeitures (Appendix No. 15)	.....	4,472 45	.....	3,622 98
		3,403,799 57		3,718,669 53
SCHEDULE No. 29				
Marine and Fisheries—				
Fisheries—				
Alberta	19,494 00	.....	18,364 50	
British Columbia	107,948 88	.....	47,628 84	
Manitoba	20,170 00	.....	22,434 00	
New Brunswick	9,281 75	.....	11,062 50	
Nova Scotia	9,804 00	.....	10,517 75	
Prince Edward Island	2,931 00	.....	2,887 75	
Saskatchewan	5,233 50	.....	5,750 25	
Yukon	350 00	.....	505 00	
	175,213 13	.....	119,150 59	
LESS—Refunds	.....	.....	7 00	
		175,213 13		119,143 59
Carried forward	.....	175,213 13	.....	119,143 59

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1926-27 AND 1927-28—*Continued*

	1926-27		1927-28	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward		175,213,13		119,143 59
SCHEDULE 29—*Concluded*				
Marine and Fisheries—Concluded				
Harbour Dues		2,822 05		2,163 71
Wharves and Piers		114,255 15		55,638 92
Dominion Steamers		11,875 30		5,909 04
Steamboat Inspection		135,130 90		127,851 95
Casual Revenue (Appendix No. 14)		402,501 32		523,573 99
Fines and Forfeitures (Appendix No. 15)		13,007 22		15,648 61
Premium, Discount and Exchange		1 08		14 25
		854,806 15		849,944 06
SCHEDULE No. 30				
Patent and Copyright Office—				
Patent Fees—				
Assignments	15,224 30		16,800 61	
Caveats	2,034 50		2,031 75	
Certified Copies	10,417 86		11,859 97	
Patents	400,793 00		371,491 88	
Petition under Section 17, etc	70 00		45 00	
Reinstatement of Application	645 00		555 00	
Restoration of Patent	3,400 00		3,226 65	
Revival of Patent	2,110 00		1,815 00	
Subscriptions to Record	3,997 37		4,254 38	
Sundries	−2 25		59 30	
		438,689 78		412,139 54
Trademarks and Copyrights—				
Assignments	2,339 00		3,124 25	
Certified Copies	913 60		687 65	
Copyrights	9,226 11		9,172 85	
Designs	2,775 00		2,895 50	
Timbermarks	52 00		28 00	
Trademarks	63,934 25		67,744 05	
		79,239 96		83,652 30
		517,929 74		495,791 84
Fines and Forfeitures		1 00		
		517,930 74		495,791 84
SCHEDULE No. 31				
Post Office—				
Postage, Commission on Money Orders, etc		29,069,169 35		31,562,580 03
Casual Revenue (Appendix No. 14)		15,874 59		3,624 49
Fines and Forfeitures (Appendix No. 15)		639 00		1,013 97
		29,085,682 94		31,567,218 49
SCHEDULE No. 32				
Public Works—				
Ferries	1,048 00		1,361 00	
Graving Docks	125,305 58		97,305 12	
Slides and Booms	96 94		16 79	
Telegraphs	296,413 75		296,598 07	
		422,864 27		395,280 98
Casual Revenue (Appendix No. 14)		213,077 74		191,371 30
Fines and Forfeitures (Appendix No. 15)				700 00
		635,942 01		587,352 28

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1926-27 AND 1927-28—*Continued*

	1926-27		1927-28	
	$ cts.	$ cts.	$ cts.	$ cts.
SCHEDULE No. 33				
Railways and Canals—				
Canals—				
Beauharnois	15,075 31		15,075 31	
Cardinal	1,817 50		2,006 50	
Carillon and Grenville	1,174 00		637 00	
Chambly	958 24		1,015 74	
Chats Falls	1 00		1 00	
Cornwall	26,046 70		26,164 80	
Lachine	226,319 07		234,381 27	
Murray	239 00		232 14	
Port Colborne Elevator	494,455 92		614,466 25	
Rideau	12,699 00		12,562 51	
Sault Ste. Marie	86 00		139 00	
Soulanges	3,971 67		4,203 89	
St. Ann's Lock and Canal	545 36		648 64	
St. Peters	30 00		73 00	
Trent	95,792 02		95,708 02	
Welland	79,657 29		346,289 07	
Welland Ship Canal	2,824 01		2,013 32	
Miscellaneous	2 00		60 00	
		961,694 09		1,355,677 46
Casual Revenue (Appendix No. 14)		160,460 56		173,175 01
Fines and Forfeitures (Appendix No. 15)		112 00		27 00
		1,122,266 65		1,528,879 47
SCHEDULE No. 34				
Trade and Commerce—				
Electric Light Inspection—				
Inspection Fees	180,710 40		189,399 20	
Electrical Standards Laboratory Fees	133 75		162 25	
Export licenses, electric power	650 50		675 00	
Export Tax, electric power	357,421 89		373,676 21	
		538,916 54		563,912 66
Gas Inspection—				
Alberta	3,639 20		4,457 60	
British Columbia	7,396 90		6,737 00	
Manitoba	2,732 50		4,006 20	
New Brunswick	967 40		1,283 80	
Nova Scotia	469 60		639 60	
Ontario	40,553 90		47,154 20	
Quebec	21,120 70		21,437 20	
		76,880 20		85,715 60
Weights and Measures Inspection—				
Alberta	30,082 35		36,332 90	
British Columbia	12,247 45		13,478 05	
Manitoba	28,550 40		28,649 50	
New Brunswick	7,799 65		7,826 80	
Nova Scotia	8,698 65		8,796 75	
Ontario	118,300 45		137,844 10	
Prince Edward Island	2,042 35		2,180 65	
Quebec	77,060 70		74,856 50	
Saskatchewan	43,156 55		46,717 38	
Yukon	92 65		98 15	
Laboratory Fees	2,503 04		2,422 35	
Post Office Inspectors Fees	2,500 00		2,500 00	
	333,034 24		361,703 13	
LESS—Refunds			13 00	
		333,034 24		361,690 13
Canada Grain Act		2,582,984 15		2,677,877 52
Casual Revenue (Appendix No. 14)		31,670 57		23,170 18
Fines and Forfeitures (Appendix No. 15)		344 36		300 00
Premium, Discount and Exchange				1 80
		3,563,830 06		3,712,667 89

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1926-27 AND 1927-28—*Continued*

	1926-27		1927-28	
	$ cts.	$ cts.	$ cts.	$ cts.
SCHEDULE No. 35				
Other Departments—				
Agriculture—				
Casual Revenue (Appendix No. 14)	302,193 84		344,468 35	
Fines and Forfeitures (Appendix No. 15)	6,187 77		10,332 07	
		308,381 61		354,800 42
Archives—				
Casual Revenue (Appendix No. 14)		31 00		14 30
Civil Service Commission—				
Casual Revenue (Appendix No. 14)		7,393 00		10,417 25
External Affairs—				
Casual Revenue (Appendix No. 14)	139,442 07		145,202 71	
Premium, Discount and Exchange	64			
		139,442 71		145,202 71
Government Contracts Supervision Committee—				
Casual Revenue		35 00		
Health—				
Mariners Fund—				
British Columbia	71,385 11		82,783 73	
New Brunswick	22,196 99		20,187 38	
Nova Scotia	50,251 44		51,606 28	
Prince Edward Island	866 00		1,340 54	
Quebec	51,442 34		67,365 53	
	196,141 88		223,283 46	
Less—Refunds	1,061 60		1,235 38	
	195,080 28		222,048 08	
Casual Revenue (Appendix No. 14)	60,819 83		53,221 45	
Fines and Forfeitures (Appendix No. 15)	12,659 91		10,505 75	
		268,560 02		285,775 28
Immigration and Colonization—				
Chinese Immigration Tax	13,228 00		14,179 00	
Casual Revenue (Appendix No. 14)	32,780 98		9,100 11	
Fines and Forfeitures (Appendix No. 15)	64,031 45		76,042 19	
Premium, Discount and Exchange	138 67		25 46	
		110,179 10		99,346 76
Indian Affairs—				
Casual Revenue (Appendix No. 14)		8,423 90		19,824 00
Insurance—				
Insurance inspection	120,333 73		123,767 85	
Casual Revenue (Appendix No. 14)			113 70	
Fines and Forfeitures (Appendix No. 15)			500 00	
		120,333 73		124,381 55
Justice—				
Penitentiaries—				
Alberta	4,488 50		4,477 00	
British Columbia	4,879 71		5,981 50	
Dorchester	18,566 79		20,614 08	
Kingston	88,125 85		90,178 34	
Manitoba	20,369 65		22,793 59	
Saskatchewan	12,817 01		13,247 09	
St. Vincent de Paul	21,090 82		20,641 89	
	170,338 33		177,933 49	
Casual Revenue (Appendix No. 14)	28,961 33		23,645 46	
Fines and Forfeitures (Appendix No. 15)	205 50		187 39	
		199,505 16		201,766 34
Labour—				
Casual Revenue (Appendix No. 14)	1,515 40		1,425 73	
Fines and Forfeitures (Appendix No. 15)	76,189 11		23,810 89	
		77,704 51		25,236 62
Carried forward		1,239,989 74		1,266,765 23

COMPARATIVE SCHEDULES OF ORDINARY REVENUE FOR THE FISCAL YEARS 1926-27 AND 1927-28—*Concluded*

	1926-27		1927-28	
	$ cts.	$ cts.	$ cts.	$ cts.
Brought forward	.....	1,239,989 74	.....	1,226,765 23
SCHEDULE No. 35—*Concluded*				
Other Departments—Concluded				
Legislation—				
Senate—				
Casual Revenue (Appendix No. 14)	30,097 41	.....	31,010 07	
House of Commons—				
Casual Revenue (Appendix No. 14)	14,029 75	.....	29,532 28	
Fines and Forfeitures	15,200 00			
		59,327 16		60,542 35
Mines—				
Casual Revenue (Appendix No. 14)	8,915 48	.....	4,987 03	
Fines and Forfeitures (Appendix No. 15)	260 85	.....	205 00	
		9,176 33		5,192 03
National Defence—				
Militia Pensions	128,386 40	.....	128,016 62	
Royal Military College	18,239 19	.....	20,232 00	
Casual Revenue (Appendix No. 14)	213,150 28	.....	149,239 80	
Fines and Forfeitures (Appendix No. 15)	.....	.....	775 00	
Premium, Discount and Exchange	3,630 71	.....	1 20	
		363,406 58		298,264 62
Office of the Secretary to the Governor General—				
Casual Revenue	.....	42 00		
Public Printing and Stationery—				
Canada Gazette	68,311 97	.....	81,242 62	
Casual Revenue (Appendix No. 14)	116,758 14	.....	130,594 66	
		185,070 11		211,837 28
Royal Canadian Mounted Police—				
Officers Pension Revenue	8,769 06	.....	6,144 26	
Casual Revenue (Appendix No. 14)	8,000 73	.....	9,419 71	
		16,769 79		15,563 97
Secretary of State—				
Casual Revenue (Appendix No. 14)	.....	344,514 80	.....	646,814 74
Soldiers' Civil Re-establishment—				
Casual Revenue (Appendix No. 14)	490,860 82	.....	207,351 58	
Premium, Discount and Exchange	26 60	.....	1 19	
		490,887 42		207,352 77
Soldier Settlement Board—				
Casual Revenue (Appendix No. 14)	224 70	.....	486 49	
Premium, Discount and Exchange	1,001 21	.....	393 26	
		1,225 91		879 75
Superannuation Revenue—				
(Appendix No. 17)	.....	392 15	.....	172 38
		2,710,801 99		2,713,385 12

SCHEDULES OF SPECIAL REVENUE, 1927-28

—	$ cts.	$ cts.	$ cts.
Schedule No. 36			
War and Demobilization Receipts—			
Refunds of Previous Years' Expenditure—			
National Defence—Militia Services		9,834 01	
Secretary of State		119,769 66	
Indian Affairs		12,000 00	
Public Works		63,370 58	
			204,974 25
Schedule No. 37			
Miscellaneous Receipts—			
Refund of expenditure incurred by Department of National Defence between June 12, 1925, and August 24, 1925, for troops sent to Cape Breton, N.S., for strike duty		133,116 73	
Payments received on account of Reparations from Germany under the Dawes Plan		3,002,047 78	
Payments received on account of Reparations from Germany "Pre-Dawes"		3,789,430 00	
			6,924,594 51

SCHEDULES TO CASH STATEMENT

——	$ cts.	Receipts $ cts.	Payments $ cts.
Schedule "AA"			
Advances to Foreign Governments—			
Belgian Government Account (sale of horses)		4,528,336 00	
Greek Government Account		195,000 00	
Balance of receipts over payments as per cash statement			4,723,336 00
		4,723,336 00	4,723,336 00
Schedule "BB"			
Insurance and Superannuation Funds—			
Government Annuities		4,353,526 95	1,080,162 17
Insurance Fund, Civil Service		721,566 58	142,739 18
Insurance Fund, Returned Soldiers		1,598,597 05	724,391 68
Retirement Fund		746,322 39	633,061 28
Civil Service Superannuation and Retirement Act. 1893, Now Chap. 17, R. S. 1906		109,737 47	41,864 00
Civil Service Superannuation Act. 1924, Now Chap. 24, R. S. 1927		4,541,341 55	514,494 23
Balance of receipts over payments as per cash statement			8,934,379 45
		12,071,091 99	12,071,091 99
Schedule "CC"			
Trust Funds—			
Alberta School Lands		864,433 85	425,626 39
Burrard Dry Dock Pontoons		3,737 91	
Canadian National Railways—			
Equipment Issues, 1923, Redemption Account		1,500,000 00	1,499,000 00
Guaranteed Bond Issues, Outstanding Interest		2,436,750 00	2,452,450 00
Common School Fund		989 93	
Contractors' Securities		1,076,968 62	932,727 91
Decayed Pilots Fund		20,192 73	12,433 71
Empress of Ireland Relief Fund		4,013 12	4,099 68
Halifax Pilots Pension Fund		8,929 95	8,133 47
Immigration Guarantee and Special Funds		268,631 68	262,645 84
Indian Funds		1,604,541 99	1,262,128 84
Manitoba School Lands		61,699 63	47,211 57
Military Estates No. 1		48,505 05	43,335 53
Military Estates No. 2		2,215 65	3,800 95
Militia and Defence—Regimental Funds		4,862 55	154 90
Royal Military College—Cadet Funds		59,292 27	57,375 81
Saskatchewan School Lands		1,203,737 83	799,512 90
Soldiers' Civil Re-establishment—War Service Gratuity		5,726 61	6,349 66
Soldiers' Civil Re-establishment—Pensions, etc		458,885 98	504,509 32
Soldier Settlement Board		84,116 45	96,779 88
Sydney Pilots Pension Fund		11,505 45	12,995 51
St. John Pilots Pension Fund		8,131 77	11,148 73
Balance of receipts over payments as per cash statement			1,295,448 42
		9,737,869 02	9,737,869 02
Schedule "DD"			
Miscellaneous Current Accounts—			
Advances to Royal Mint, Copper Purchase Account		47,361 58	50,103 88
Gold Purchase Account		26,679,430 34	27,219,071 90
Nickel Purchase Account		256,000 00	254,724 75
Silver Purchase Account		588,363 45	539,874 23
Bank of Montreal, Provincial Notes Suspense		63 00	
Bond Suspense Account		12,070,600 00	
Candidates Election Deposits		1,000 00	1,000 00
Canada Grain Act, Advance Account		2,072,232 20	2,078,083 88
Dominion Assay Office		1,748,987 87	1,775,517 00
Empire Settlement Scheme, Advances under		96,798 41	79,666 74
Empire Settlement Scheme, Replacement Suspense		39,266 79	46,035 14
Foreign Coin		2,279,864 93	2,307,510 14
Halifax Pilots—General Account		99,143 85	99,143 85
Imperial Government Account		99,072 28	96,197 10
Indian Affairs, Special		11,515 36	23,182 97
King's Printer, Printing Account		2,507,755 12	2,214,303 00
Carried forward		48,597,455 18	36,784,414 58

SCHEDULES TO CASH STATEMENT—*Continued*

——	$ cts.	Receipts $ cts.	Payments $ cts.
Brought forward		48,597,455 18	36,784,414 58
SCHEDULE "DD"—*Concluded*			
Miscellaneous Current Accounts—Concluded			
King's Printer, Stationery Account		1,267,012 65	1,182,395 39
Registration and Insurance Fees re War Loan Bonds		25,658 97	25,658 97
Saskatchewan Government Seed Grain Advances of 1908		1,908 39	
Seed Grain and Relief, Department of the Interior		313,193 83	152,370 68
Sterling Exchange Refunds		924 33	924 33
Sydney Pilots—General Account		56,130 66	56,130 66
St. John Pilots—General Account		51,500 50	51,500 50
Unpaid Debentures		16,262 71	
Unpaid Warrants		32 40	
Walter J. King—Suspense Account		80 00	
Balance of receipts over payments as per cash statement			12,076,764 51
		50,330,159 62	50,330,159 62
SCHEDULE "EE"			
Soldier and General Land Settlement—			
Soldier Land Settlement, Loans		6,100,674 25	3,246,666 42
General Land Settlement, Loans		739,303 81	2,958,638 81
Land Settlement, Purchased Lands		25,689 79	76,460 22
Soldier Land Settlement, Assurance Fund		300 00	
Land Settlement, Suspense		758,060 16	538,166 34
British Land Settlement Advances, No. 6		1,134,533 06	1,134,533 06
Balance of receipts over payments as per cash statement			804,096 22
		8,758,561 07	8,758,561 07
SCHEDULE "FF"			
Public Works Capital—Canals—			
Trent Canal—			
Construction. and betterments	9,578 87		
Claim of F. A. Robertson, with interest thereon	19,542 01		
Claim of Dennon and Rodgers, with interest thereon	11,902 14		
			41,023 02
Refunds of expenditures of previous years		820 00	
Welland Ship Canal—			
Construction	14,149,743 28		
Compensation to P. Lyall & Sons Construction Company for washing rock excavated during 1926	38,752 00		
			14,188,495 28
Refunds of expenditures of previous years		465,569 53	
Welland Canal—			
Refunds of expenditures of previous years		224 00	
Balance of payments over receipts as per cash statement		13,762,904 77	
		14,229,518 30	14,229,518 30
SCHEDULE "GG"			
Public Works Capital—Railways—			
Canadian Government Railways—			
Exchequer Court Awards	8,953 09		
Outstanding cheques paid	700 00		
			9,653 09
Refunds of expenditure of previous years—			
Sale of S.S. Drummond and McKee, fifth instalment		36,000 00	
New Brunswick and Prince Edward Island Railway—			
Payments for bonds and interest under Chap. 16, Statutes of 1915			63,418 77
Carried forward		36,000 00	73,071 86

SCHEDULES TO CASH STATEMENT—*Continued*

—	$ cts.	Receipts $ cts.	Payments $ cts.
Brought forward		36,000 00	73,071 86
SCHEDULE "GG"—*Concluded*			
Public Works Capital—Railways—Concluded			
Hudson Bay Railway—			
Construction and betterments			3,002,382 86
Refunds of expenditure of previous years		328,158 29	
Hudson Bay Terminals—			
Fort Churchill—Construction and betterments			880,643 30
Port Nelson—Refunds of expenditure of previous years		364 76	
Canadian Pacific Railway—Original construction			71 00
Balance of payments over receipts as per cash statement		3,591,645 97	
		3,956,169 02	3,956,169 02
SCHEDULE "HH"			
Public Works Capital—Miscellaneous—			
Ottawa—New departmental building			851 60
Ottawa Parliament Building			174,963 18
Ottawa—Expropriation of property between Sparks and Wellington streets, east of Elgin street			42,065 46
Washington, D.C.—Canadian Legation building and site			477,754 35
Esquimalt, B.C.—Construction of Dry Dock			143,291 25
Port Arthur and Fort William—Harbour improvements			103,962 49
Quebec Harbour—Champlain Dock			46,600 87
Sorel Harbour—Improvements			188,590 00
St. John Harbour—Improvements			181,624 44
Toronto Harbour—Improvements			14,709 10
St. Andrews Rapids, Red River, Manitoba		68 75	
St. Lawrence River—Improvements—			
Ship Channel—Dredging	1,921,902 56		
Sorel Shipyard	95,561 83		
			2,017,464 39
Sorel Shipyard—Refunds of expenditure of previous years		711 27	
Government Shipbuilding Program—Proceeds from sale of ships		110,000 00	
Balance of payments over receipts as per cash statement		3,281,097 11	
		3,391,877 13	3,391,877 13
SCHEDULE "II"			
Advances to Provinces, Banks, etc.—			
Province of Manitoba (Housing Loans)		165,000 00	
Province of New Brunswick (Housing Loans)		58,000 00	
Province of Nova Scotia (Housing Loans)		175,000 00	
Province of Ontario (Housing Loans)		9,350,000 00	
Province of Quebec (Housing Loans)		20,440 00	
Loans to Banks, "Finance Act, Chap. 70, R.S. 1927"		278,250,000 00	301,750,000 00
Montreal Harbour Commission		1,000,000 00	3,105,000 00
Vancouver Harbour Commission			1,564,000 00
Balance of payments over receipts as per cash statement		17,400,560 00	
		306,419,000 00	306,419,000 00
SCHEDULE "JJ"			
Savings Banks—			
Post Office Savings Banks		4,411,584 08	4,350,711 12
Dominion Government Savings Banks		1,219,186 24	2,098,325 73
Balance of payments over receipts as per cash statement		818,266 53	
		6,449,036 85	6,449,036 85
SCHEDULE "KK"			
Contingent Funds—			
Banque du Peuple			10 00
Banque St. Hyacinthe		5 00	10 00
Banque St. Jean			10 00
Bank of Vancouver			42 49
Banque Ville Marie		25 00	25 00
Board of Pension Commissioners, Mennonite Funds			62 25
Carried forward		30 00	159 74

SCHEDULES TO CASH STATEMENT—*Concluded*

—	$ cts.	Receipts $ cts.	Payments $ cts.
Brought forward		30 00	159 74
SCHEDULE "KK"—*Concluded*			
Contingent Funds—Concluded			
Cash Suspense		459,437 09	167,734 78
Commercial Bank of Manitoba		5 00	
Farmers' Bank			62 33
Home Bank of Canada		65,776 91	6,822 55
Income Tax Suspense		5,600 00	2,400 50
Internment Operations			309 25
Interior Department Suspense			2,400 00
Land Assurance Fund		364 77	
Lumbermen's Indemnity Exchange (In Liquidation)		4,558 04	5,298 26
National Benefit Assurance Company (In Liquidation)			8,691 08
Outstanding Cheques		56,232 46	48,479 45
Prisoners of War			2 90
Railways and Canals Suspense		14 75	
Railway Grade Crossing Fund			678,787 53
Sovereign Bank of Canada		10,121 53	301 54
Unclaimed Dividends under the Bankruptcy Act		8,667 00	61 43
Victory Loan 1917, at credit of subscribers in arrears			245 00
Victory Loan 1918, at credit of subscribers in arrears			280 00
Victory Loan 1919, at credit of subscribers in arrears			10 00
York County Loan and Savings Company (In Liquidation)			39 81
Balance of payments over receipts as per cash statement		311,278 60	
		922,086 15	922,086 15
SCHEDULE "LL"			
Loan Accounts (Funded Debt)—			
Payable in Canada—			
Dominion Stock, issue A, 3½ per cent			1,000 00
Dominion Stock, issue B, 3½ per cent			4,300 00
Dominion of Canada War Loan 1915-25, 5 per cent			89,700 00
Debenture Stock 5 per cent (School Lands)		521,000 00	
War Savings Certificates		3,100 95	1,198 10
War Savings and Thrift Stamps			4,852 00
Dominion of Canada Savings Certificates			10,490 25
Victory Loan, 1917, due 1922, 5½ per cent			18,100 00
Victory Loan, 1917, due 1927, 5½ per cent			62,133,550 00
Victory Loan, 1918, due 1923, 5½ per cent			50,500 00
Victory Loan, 1919, due 1924, 5½ per cent			87,000 00
Renewal Loan, 1922, due 1927, 5½ per cent			28,514,700 00
Renewal Loan, 1922, due 1932, 5½ per cent			12,070,600 00
Refunding Loan, 1923, due 1928, 5 per cent			6,254,000 00
Treasury Notes, 1924, due 1927, 4 per cent			8,000,000 00
Three year Treasury Notes, 1927, due 1930, 4 per cent		45,000,000 00	
Payable in New York—			
Public Service Loan, due 1926, 5 per cent			10,000 00
One Year Notes, due 1926, 4 per cent			5,000 00
Sinking Funds—			
Loan of 1909-34	692,105 49		
Loan of 1930-50	1,711,374 47		
Loan of 1940-60	1,015,205 73		
			3,418,685 69
Sinking Funds Cash		1,272,263 60	1,359,209 87
Balance of payments over receipts as per cash statement		75,236,521 36	
		122,032,885 91	122,032,885 91
SCHEDULE "MM"			
Interest due and unpaid—			
Unpaid Interest, Domestic Loans		100,547,861 56	100,716,473 06
Unpaid Interest, New York Loans		11,393,700 00	11,386,482 25
Unpaid Interest, London Loans		12,321 77	27 26
Balance of payments over receipts as per cash statement		148,599 24	
		112,102,982 57	112,102,982 57

Year	Expenditure chargeable to Consolidated Fund	Expenditure chargeable to Capital	Railway Subsidies	War and Demobilization	Other charges including Cost of Loan Flotations	Total Disbursements
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1868.....	13,486,092 96	548,437 58	.....	.....	37,157 98	14,071,688 52
1869.....	14,038,084 00	440,418 40	.....	.....	429,663 24	14,908,165 64
1870.....	14,345,509 58	3,515,116 18	.....	.....	155,988 18	18,016,613 94
1871.....	15,623,081 72	3,670,396 51	.....	.....	.....	19,293,478 23
1872.....	17,589,468 82	7,853,049 79	.....	.....	223,456 13	25,665,974 74
1873.....	19,174,647 92	19,859,441 17	.....	.....	5,718 48	39,039,807 57
1874.....	23,316,316 75	10,177,740 06	.....	.....	4,018 90	33,498,075 71
1875.....	23,713,071 04	6,922,742 33	.....	.....	2,253,097 17	32,888,910 54
1876.....	24,488,372 11	7,154,007 94	.....	.....	315,764 40	31,958,144 45
1877.....	23,519,301 77	7,599,709 55	.....	.....	1,388,984 38	32,507,995 70
1878.....	23,503,158 25	6,657,200 36	.....	.....	385,412 99	30,545,771 60
1879.....	24,455,381 56	5,648,331 66	.....	.....	676,225 30	30,779,938 52
1880.....	24,850,634 45	8,241,173 98	.....	.....	949,947 68	34,041,756 11
1881.....	25,502,554 42	8,176,316 50	.....	.....	117,771 74	33,796,642 66
1882.....	27,067,103 58	7,405,637 06	.....	.....	201,884 75	34,674,625 39
1883.....	28,730,157 45	14,147,359 76	.....	.....	21,368 75	42,898,885 96
1884.....	31,107,706 25	23,977,702 44	208,000 00	.....	2,567,452 84	57,860,861 53
1885.....	35,037,060 12	13,220,185 35	403,245 00	.....	502,587 06	49,163,077 53
1886.....	39,011,612 26	9,589,734 19	2,701,249 00	.....	10,534,973 07	61,837,568 52
1887.....	35,657,680 16	4,439,938 72	1,406,533 00	.....	.....	41,504,151 88
1888.....	36,718,494 79	7,162,964 26	1,027,041 92	.....	155,623 07	45,064,124 04
1889.....	36,917,834 76	4,420,313 66	846,721 83	.....	1,333,327 81	43,518,198 06
1890.....	35,994,031 47	4,053,158 98	1,678,195 72	.....	44,946 56	41,770,332 73
1891.....	36,343,567 96	3,115,860 04	1,265,705 87	.....	68,074 32	40,793,208 19
1892.....	36,765,894 18	2,164,456 78	1,248,215 93	.....	2,093,569 43	42,272,136 32
1893.....	36,814,052 90	3,088,317 60	811,394 07	.....	139,963 34	40,853,727 91
1894.....	37,585,025 52	3,862,969 67	1,229,885 10	.....	330,353 60	43,008,233 89
1895.....	38,132,005 05	3,030,490 40	1,310,549 10	.....	399,293 89	42,872,338 44
1896.....	36,949,142 03	3,781,311 21	3,228,745 49	.....	137,185 19	44,096,383 92
1897.....	38,349,759 84	3,523,160 23	416,955 30	.....	682,880 52	42,972,755 89
1898.....	38,832,525 70	4,143,503 39	1,414,934 78	.....	943,317 19	45,334,281 06
1899.....	41,903,500 54	5,936,342 94	3,201,220 05	.....	501,571 76	51,542,635 29
1900.....	42,975,279 51	7,468,843 24	725,720 35	.....	1,547,623 74	52,717,466 84
1901.....	46,866,367 84	7,695,488 34	2,512,328 86	.....	908,681 42	57,982,866 46
1902.....	50,759,391 97	10,078,638 06	2,093,939 00	.....	1,038,830 83	63,970,799 86
1903.....	51,691,902 76	7,052,724 58	1,463,222 34	.....	1,538,722 13	61,746,571 81
1904.....	55,612,832 70	7,881,718 54	2,046,878 45	.....	6,713,617 94	72,255,047 63
1905.....	63,319,682 86	11,933,491 91	1,275,629 53	.....	2,275,334 47	78,804,138 77
1906.....	67,240,640 95	11,913,871 11	1,637,574 37	.....	2,485,555 29	83,277,641 72
1907 9mo.	51,542,161 09	11,329,143 82	1,324,889 30	.....	1,581,944 36	65,778,138 57
1908.....	76,641,451 59	30,429,906 86	2,037,629 30	.....	3,469,692 12	112,578,679 87
1909.....	84,064,232 38	42,593,166 97	1,785,887 39	.....	4,998,237 55	133,441,524 29
1910.....	79,411,747 12	29,756,353 38	2,048,097 05	.....	4,179,576 15	115,395,773 70
1911.....	87,774,198 32	30,852,963 38	1,284,892 04	.....	2,949,196 72	122,861,250 46
1912.....	98,161,440 77	30,939,575 95	859,400 25	.....	7,181,665 23	137,142,082 20
1913.....	112,059,537 41	27,206,046 13	4,935,507 35	.....	255,786 93	144,456,877 82
1914.....	127,384,472 99	37,180,175 93	19,036,236 77	.....	2,640,161 94	186,241,047 63
1915.....	135,523,206 54	41,447,320 03	5,191,507 48	60,750,476 01	5,186,016 27	248,098,526 33
1916.....	130,350,726 90	38,566,950 50	1,400,171 42	166,197,755 47	3,186,898 20	339,702,502 49
1917.....	148,599,343 23	26,880,031 51	959,583 88	306,488,814 63	15,275,345 03	498,203,118 28
1918.....	178,284,312 83	43,111,903 63	720,404 75	343,836,801 98	10,706,786 72	576,660,209 91
1919.....	232,731,282 98	25,031,266 30	43,805 32	446,519,439 48	−7,283,581 61	697,042,212 47
1920.....	303,843,929 90	69,301,877 83	334,845 55	346,612,954 56	19,995,313 04	740,088,920 88
1921.....	361,118,145 21	40,012,807 22	.....	16,997,543 99	492,048 06	418,620,544 48
1922.....	347,560,690 63	16,295,332 55	.....	1,544,249 66	301,518 01	365,701,790 85
1923.....	332,293,732 09	9,807,124 34	.....	4,464,759 76	4,042,930 53	350,608,546 72
1924.....	324,813,189 75	10,861,277 09	*−1,521 82*	446,082 79	7,902,758 94	344,021,786 75
1925.....	318,891,901 25	16,550,510 77	.....	506,931 27	3,953,432 65	339,902,775 94
1926.....	320,660,479 14	16,798,548 92	.....	191,392 79	6,330,092 09	343,980,512 94
1927.....	319,548,172 59	19,558,702 63	.....	64,485 08	7,814,976 87	346,986,337 17
1928.....	336,167,960 98	20,635,647 85	.....	1,656,011 00	1,705,311 47	360,164,931 30
	5,821,415,244 19	916,698,898 06	76,115,221 09	1,696,277,698 47	150,976,052 81	8,661,483,114 62

Year	Consolidated Fund Receipts	Other Receipts	Total Receipts	Difference between Receipts and Expenditure	Consolidated Fund	
					Surplus	Deficit
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1868.....	13,687,928 49	.....	13,687,928 49	383,760 03	201,835 53	.....
1869.....	14,379,174 52	.....	14,379,174 52	528,991 12	341,090 52	.....
1870.....	15,512,225 65	27,431 71	15,539,657 36	2,476,956 58	1,166,716 07	.....
1871.....	19,335,560 81	39,475 98	19,375,036 79	+ 81,558 56	3,712,479 09	.....
1872.....	20,714,813 68	.....	20,714,813 68	4,951,161 06	3,125,344 86	.....
1873.....	20,813,469 45	157,121 90	20,970,591 35	18,069,216 22	1,638,821 53	.....
1874.....	24,205,092 54	302,560 39	24,507,652 93	8,990,422 78	888,775 79	.....
1875.....	24,648,715 04	1,008 58	24,649,723 62	8,239,186 92	935,644 00	.....
1876.....	22,587,587 05	4,468 22	22,592,055 27	9,366,089 18	.....	1,900,785 06
1877.....	22,059,274 11	868,486 44	22,927,760 55	9,580,235 15	.....	1,460,027 66
1878.....	22,375,011 88	31,245 49	22,406,257 37	8,139,514 23	.....	1,128,146 37
1879.....	22,517,382 14	4,503,142 76	27,020,524 90	3,759,413 62	.....	1,937,999 42
1880.....	23,307,406 69	57,140 21	23,364,546 90	10,677,209 21	.....	1,543,227 76
1881.....	29,635,297 54	.....	29,635,297 54	4,161,345 12	4,132,743 12	.....
1882.....	33,383,455 52	1,799,093 69	35,182,549 21	+ 507,923 82	6,316,351 94	.....
1883.....	35,794,649 80	1,009,019 15	36,803,668 95	6,095,217 01	7,064,492 35	.....
1884.....	31,861,961 73	953,264 00	32,815,225 73	25,045,635 80	754,255 48	.....
1885.....	32,797,001 22	557,039 59	33,354,040 81	15,809,036 72	.....	2,240,058 90
1886.....	33,177,040 39	302,842 41	33,479,882 80	28,357,685 72	.....	5,834,571 87
1887.....	35,754,993 25	537 66	35,755,530 91	5,748,620 97	97,313 09	.....
1888.....	35,908,463 53	.....	35,908,463 53	9,155,660 51	.....	810,031 26
1889.....	38,782,870 23	.....	38,782,870 23	4,735,327 83	1,865,035 47	.....
1890.....	39,879,925 41	.....	39,879,925 41	1,890,407 32	3,885,893 94	.....
1891.....	38,579,310 88	.....	38,579,310 88	2,213,897 31	2,235,742 92	.....
1892.....	36,921,871 60	.....	36,921,871 60	5,350,264 72	155,977 42	.....
1893.....	38,168,608 85	40,000 00	38,208,608 85	2,645,119 06	1,354,555 95	.....
1894.....	36,374,693 07	190 14	36,374,883 21	6,633,350 68	.....	1,210,332 45
1895.....	33,978,129 47	.....	33,978,129 47	8,894,208 97	.....	4,153,875 58
1896.....	36,618,590 72	.....	36,618,590 72	7,477,793 20	.....	330,551 31
1897.....	37,829,778 40	.....	37,829,778 40	5,142,977 49	.....	519,981 44
1898.....	40,555,238 03	1,272 03	40,556,510 06	4,777,771 00	1,722,712 33	.....
1899.....	46,741,249 54	1,853 41	46,743,102 95	4,799,532 34	4,837,749 00	.....
1900.....	51,029,994 02	1,472 69	51,031,466 71	1,686,000 13	8,054,714 51	.....
1901.....	52,514,701 13	1,631 63	52,516,332 76	5,466,533 70	5,648,333 29	.....
1902.....	58,050,790 03	1,543 31	58,052,333 34	5,918,466 52	7,291,398 06	.....
1903.....	66,037,068 93	3,311,015 17	69,348,084 10	+ 7,601,512 29	14,345,166 17	.....
1904.....	70,669,816 82	9,434 67	70,679,251 49	1,575,796 14	15,056,984 12	.....
1905.....	71,182,772 67	3,299 83	71,186,072 50	7,618,066 27	7,863,089 81	.....
1906.....	80,139,360 07	2,033 76	80,141,393 83	3,136,247 89	12,898,719 12	.....
1907 9 mo	67,969,328 29	2,781 36	67,972,109 65	+ 2,193,971 08	16,427,167 20	.....
1908.....	96,054,505 81	910 91	96,055,416 72	16,523,263 15	19,413,054 22	.....
1909.....	85,093,404 35	456,175 41	85,549,579 76	47,891,944 53	1,029,171 97	.....
1910.....	101,503,710 93	112,764 65	101,616,475 58	13,779,298 12	22,091,963 81	.....
1911.....	117,780,409 78	103,918 58	117,884,328 36	4,976,922 10	30,006,211 46	.....
1912.....	136,108,217 36	.....	136,108,217 36	1,033,864 84	37,946,776 59	.....
1913.....	168,689,903 45	524 04	168,690,427 49	+ 24,233,549 67	56,630,366 04	.....
1914.....	163,174,394 56	.....	163,174,394 56	23,066,653 07	35,789,921 57	.....
1915.....	133,073,481 73	.....	133,073,481 73	115,025,044 60	.....	2,449,724 81
1916.....	172,147,838 27	1,555 30	172,149,393 57	167,553,108 92	41,797,111 37	.....
1917.....	232,701,294 00	.....	232,701,294 00	265,501,824 28	84,101,950 77	.....
1918.....	260,778,952 55	.....	260,778,952 55	315,881,257 36	82,494,639 72	.....
1919.....	312,946,747 18	.....	312,946,747 18	384,095,465 29	80,215,464 20	.....
1920.....	349,746,334 70	.....	349,746,334 70	390,342,586 18	45,902,404 80	.....
1921.....	434,386,536 60	1,905,647 81	436,292,184 41	+ 17,671,639 93	73,268,391 39	.....
1922.....	381,952,386 99	319,184 45	382,271,571 44	+ 16,569,780 59	34,391,696 36	.....
1923.....	394,614,900 00	8,479,310 30	403,094,210 30	+ 52,485,663 58	62,321,167 91	.....
1924.....	396,837,682 22	9,743,635 74	406,581,317 96	+ 62,559,531 21	72,024,492 47	.....
1925.....	346,834,479 25	4,680,913 18	351,515,392 43	+ 11,612,616 49	27,942,578 00	.....
1926.....	380,745,505 58	2,147,503 48	382,893,009 06	+ 38,912,496 12	60,085,026 44	.....
1927.....	398,695,776 38	1,756,704 02	400,452,480 40	+ 53,466,143 23	79,147,603 79	.....
1928.....	422,717,982 68	6,924,594 51	429,642,577 19	+ 69,477,645 89	86,550,021 70	.....
	6,963,065,047 56	50,623,748 56	7,013,688,796 12	1,647,794,318 50	1,167,169,117 26	25,519,313 89

Year	Total Debt	Total Assets	Net Debt	Increase of Debt	Decrease of Debt
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1867.....	93,046,051 73	17,317,410 36	75,728,641 37	.....	.....
1868.....	96,896,666 20	21,139,531 46	75,757,134 74	28,493 37	.....
1869.....	112,361,998 39	36,502,679 19	75,859,319 20	102,184 46	.....
1870.....	115,993,706 76	37,783,964 31	78,209,742 45	2,350,423 25	.....
1871.....	115,492,682 76	37,786,165 11	77,706,517 65	.....	503,224 80
1872.....	122,400,179 36	40,213,107 32	82,187,072 04	4,480,554 39	.....
1873.....	129,743,432 19	29,894,970 55	99,848,461 64	17,661,389 60	.....
1874.....	141,163,551 33	32,838,586 91	108,324,964 42	8,476,502 78	.....
1875.....	151,663,401 62	35,655,023 60	116,008,378 02	7,683,413 60	.....
1876.....	161,204,687 86	36,653,173 78	124,551,514 08	8,543,136 06	.....
1877.....	174,675,834 97	41,440,525 94	133,235,309 03	8,683,794 95	.....
1878.....	174,957,268 96	34,595,199 05	140,362,069 91	7,126,760 88	.....
1879.....	179,483,871 21	36,493,683 85	142,990,187 36	2,628,117 45	.....
1880.....	194,634,440 68	42,182,852 07	152,451,588 61	9,461,401 25	.....
1881.....	199,861,537 51	44,465,757 11	155,395,780 40	2,944,191 79	.....
1882.....	205,365,251 97	51,703,601 19	153,661,650 78	.....	1,734,129 62
1883.....	202,159,104 30	43,692,389 84	158,466,714 46	4,805,063 68	.....
1884.....	242,482,416 21	60,320,565 95	182,161,850 26	23,695,135 80	.....
1885.....	264,703,607 43	68,295,915 29	196,407,692 14	14,245,841 88	.....
1886.....	273,164,341 11	50,005,234 02	223,159,107 09	26,751,414 95	.....
1887.....	273,187,626 43	45,872,850 99	227,314,775 44	4,155,668 35	.....
1888.....	284,513,841 89	49,982,483 73	234,531,358 16	7,216,582 72	.....
1889.....	287,722,062 76	50,192,021 11	237,530,041 65	2,998,683 49	.....
1890.....	286,112,295 10	48,579,083 33	237,533,211 77	3,170 12	.....
1891.....	289,899,229 62	52,090,199 11	237,809,030 51	275,818 74	.....
1892.....	295,333,274 10	54,201,839 66	241,131,434 44	3,322,403 93	.....
1893.....	300,054,524 74	58,373,485 13	241,681,039 61	549,605 17	.....
1894.....	308,348,023 96	62,164,994 48	246,183,029 48	4,501,989 87	.....
1895.....	318,048,754 87	64,973,827 78	253,074,927 09	6,891,897 61	.....
1896.....	325,717,536 73	67,220,103 96	258,497,432 77	5,422,505 68	.....
1897.....	332,530,131 33	70,991,534 87	261,538,596 46	3,041,163 69	.....
1898.....	338,375,984 23	74,419,585 32	263,956,398 91	2,417,802 45	.....
1899.....	345,160,902 54	78,887,455 94	266,273,446 60	2,317,047 69	.....
1900.....	346,206,979 92	80,713,173 03	265,493,806 89	.....	779,639 71
1901.....	354,732,432 52	86,252,428 83	268,480,003 69	2,986,196 80	.....
1902.....	366,358,476 59	94,529,386 97	271,829,089 62	3,349,085 93	.....
1903.....	361,344,098 37	99,737,109 50	261,606,988 87	.....	10,222,100 75
1904.....	364,962,512 17	104,094,793 57	260,867,718 60	.....	739,270 27
1905.....	377,678,579 80	111,454,413 20	266,224,166 60	5,356,448 00	.....
1906.....	392,269,680 39	125,226,702 64	267,042,977 75	818,811 15	.....
1907 9 mo	379,966,826 09	116,294,966 13	263,671,859 96	.....	3,371,117 79
1908.....	408,207,158 25	130,246,298 41	277,960,859 84	14,288,999 88	.....
1909.....	478,535,427 02	154,605,147 85	323,930,279 17	45,969,419 33	.....
1910.....	470,663,045 99	134,394,499 66	336,268,546 33	12,338,267 16	.....
1911.....	474,941,487 42	134,899,435 39	340,042,052 03	3,773,505 70	.....
1912.....	508,338,591 77	168,419,131 06	339,919,460 71	.....	122,591 32
1913.....	483,232,555 24	168,930,929 56	314,301,625 68	.....	25,617,835 03
1914.....	544,391,368 86	208,394,518 72	335,996,850 14	21,695,224 46	.....
1915.....	700,473,814 37	251,097,731 16	449,376,083 21	113,379,233 07	.....
1916.....	936,987,802 42	321,831,631 40	615,156,171 02	165,780,087 81	.....
1917.....	1,382,003,267 69	502,816,969 89	879,186,297 80	264,030,126 78	.....
1918.....	1,863,335,898 89	671,451,836 39	1,191,884,062 50	312,697,764 70	.....
1919.....	2,676,635,724 77	1,102,104,692 33	1,574,531,032 44	382,646,969 94	.....
1920.....	3,041,529,586 91	792,660,963 12	2,248,868,623 79	674,337,591 35	.....
1921.....	2,902,482,117 04	561,603,133 35	2,340,878,983 69	92,010,359 90	.....
1922.....	2,902,347,136 96	480,211,335 23	2,422,135,801 73	81,256,818 04	.....
1923.....	2,888,827,236 65	435,050,367 91	2,453,776,868 74	31,641,067 01	.....
1924.....	2,819,610,470 28	401,827,195 40	2,417,783,274 88	.....	35,993,593 86
1925.....	2,818,066,522 94	400,628,837 35	2,417,437,685 59	.....	345,589 29
1926.....	2,768,779,184 55	379,048,085 13	2,389,731,099 42	.....	27,706,586 17
1927.....	2,726,298,717 38	378,464,347 29	2,347,834,370 09	.....	41,896,729 33
1928.....	2,677,137,242 92	380,287,010 00	2,296,850,232 92	.....	50,984,137 17
				2,421,138,136 66	200,016,545 11

COMPARATIVE STATEMENT OF RECEIPTS FROM WAR TAX REVENUES

Year	Banks	Trust and Loan Companies	Insurance Companies	Business Profits	Income Tax	Sales Tax, Tax on Cheques, Transportation Tax, etc.	Total War Tax Revenue
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1914-15	.....	.....	.....	.....	.....	98,056 95	98,056 95
1915-16	1,300,446 80	324,249 91	459,247 07	.....	.....	1,536,837 94	3,620,781 72
1916-17	1,114,023 30	202,415 48	419,698 83	12,506,516 72	.....	2,059,585 81	16,302,238 14
1917-18	1,115,757 65	269,129 08	496,540 55	21,271,083 57	.....	2,227,389 93	25,379,900 78
1918-19	1,099,764 44	323,340 02	546,113 86	32,970,061 81	9,349,719 80	11,888,508 40	56,177,508 33
1919-20	1,170,223 45	274,216 28	638,730 76	44,145,184 48	20,263,739 91	15,587,706 70	82,079,801 58
1920-21	1,257,533 70	293,801 94	807,667 12	40,841,401 25	46,381,824 31	78,803,099 18	168,385,327 50
1921-22	1,293,697 43	283,994 35	749,958 75	22,815,666 58	78,684,354 80	73,656,488 83	177,484,160 74
1922-23	1,244,437 14	312,391 39	852,328 12	13,031,461 80	59,711,538 37	106,482,718 08	181,634,874 90
1923-24	1,236,957 57	308,632 10	857,586 98	4,752,680 89	54,204,027 99	120,676,375 89	182,036,261 42
1924-25	1,217,753 85	315,314 88	867,901 96	2,704,427 37	56,248,042 82	85,810,717 42	147,164,158 30
1925-26	1,176,868 95	326,713 80	950,220 85	1,173,448 55	55,571,961 57	98,097,105 81	157,296,319 53
1926-27	1,174,664 95	335,367 65	947,829 95	710,102 19	47,386,309 22	105,613,160 00	156,167,433 96
1927-28	1,224,644 46	315,429 85	999,003 34	956,031 44	56,571,047 39	90,222,931 32	150,319,087 80

APPENDICES.

Appendix No. 1

STATEMENT showing the Funded Debt of Canada payable therein, March 31, 1928, and the annual interest payable thereon

—	Bearing 3½ per cent interest	Bearing 4 per cent interest	Bearing 4½ per cent interest	Bearing 5 per cent interest	Bearing 5½ per cent interest	Bearing 6 per cent interest	Total	Maturing
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
Loan Funds, L.C.							400 00	Overdue.
Act 28, Vic. Cap. 11, New Brunswick							600 00	Overdue.
Act 31, Vic. Cap. 4						4,000 00	4,000 00	
Act 53, Vic. Cap. 1	69,466 67						69,466 67	Various dates.
War Savings Certificates							20,155 00	Overdue.
War Savings Stamps							104,829 50	Overdue.
Dominion of Canada Savings Certificates							19,825 00	Overdue.
Debenture Stock							1,000 00	Oct. 1, 1919, overdue.
Debenture Stock							200 00	June 1, 1921, overdue.
Debenture Stock (School Lands)				28,964,000 00			28,964,000 00	
War Loan, 1915-25							76,600 00	Dec. 1, 1925, overdue.
War Loan, 1916-31				52,931,600 00			52,931,600 00	Oct. 1, 1931.
War Loan, 1917-37				90,166,900 00			90,166,900 00	Mar. 1, 1937.
Victory Loan, 1917—								
Due 1922							121,000 00	Dec. 1, 1922, overdue.
Due 1927							1,303,700 00	Dec. 1, 1927, overdue.
Due 1937					236,299,850 00		236,299,850 00	Dec. 1, 1937.
Victory Loan, 1918—								
Due 1923							152,300 00	Nov. 1, 1923, overdue.
Due 1933					446,658,800 00		446,658,800 00	Nov. 1, 1933.
Victory Loan, 1919—								
Due 1924							85,850 00	Nov. 1, 1924, overdue.
Due 1934					511,910,650 00		511,910,650 00	Nov. 1, 1934.
Renewal Loan, 1922—								
Due 1927							553,700 00	Nov. 1, 1927, overdue.
Due 1932					73,325,150 00		73,325,150 00	Nov. 1, 1932.

Refunding Loan, 1923—								
Due 1928				46,746,000 00			46,746,000 00	Oct. 15, 1928.
Due 1943				147,000,000 00			147,000,000 00	Oct. 15, 1943.
Refunding Loan, 1924—								
Due 1944			50,000,000 00				50,000,000 00	Oct. 15, 1944.
Refunding Loan, 1925-40			75,000,000 00				75,000,000 00	Sept. 1, 1940.
Refunding Loan, 1926—								
Due 1930			20,000,000 00				20,000,000 00	Feb. 1, 1930.
Due 1946			45,000,000 00				45,000,000 00	Feb. 1, 1946.
Three Year Treasury Notes, 1927—								
Due 1930		45,000,000 00					45,000,000 00	Dec. 1, 1930.
	69,466 67	45,000,000 00	190,000,000 00	365,808,500 00	1,268,194,450 00	4,000 00	1,871,516,576 17	
Less overdue Bonds and Stock							2,440,159 50	
	69,466 67	45,000,000 00	190,000,000 00	365,808,500 00	1,268,194,450 00	4,000 00	1,869,076,416 67	
Total Interest	2,431 33	1,800,000 00	8,550,000 00	18,290,425 00	69,750,694 75	240 00	98,393,791 08	

Appendix No. 2

STATEMENT showing the portion of the Funded Debt payable in London, March 31, 1928, and the annual interest payable thereon

—	At 2½ per cent interest	At 3 per cent interest	At 3½ per cent interest	At 4 per cent interest	Total Sterling	Total Currency	Maturing
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	$ cts.	
Act 47 Vic., Cap. 3	.....	.....	4,822,028 13 3	.....	4,822,028 13 3	23,467,206 27	On giving 6 months' notice or June 1, 1934.
Act 51 Vic., Cap. 2	.....	1,658,471 18 11	.....	.....	1,658,471 18 11	8,071,230 16	July 1, 1938.
Acts-54-56 Vic., Cap. 3 and 57-58 Vic., Cap. 1	.....	6,000,000 0 0	.....	.....	6,000,000 0 0	29,200,000 00	July 1, 1938.
Act 60-61 Vic., Cap. 3	1,004,421 14 2	.....	.....	.....	1,004,421 14 2	4,888,185 64	October 1, 1947.
Act 51 Vic., Cap. 32	.....	.....	3,093,700 0 0	.....	3,093,700 0 0	15,056,006 66	July 1, 1938.
Act 3 Ed. VII, Cap. 71 and 6-7 Ed. VII, Cap. 7 and 7-8 Ed. VII, Cap. 4, 8-9, Ed. VII, Caps. 35 and 19, 2 Geo. V, Cap. 1	.....	.....	28,162,775 11 0	.....	28,162,775 11 0	137,058,841 00	July 1, 1950 (on or after July 1, 1930, on giving 6 months' notice).
3-4 Geo. V, Cap. 3	.....	.....	.....	19,300,000 0 0	19,300,000 0 0	93,926,666 66	October 1, 1960 (on or after October 1, 1940, on giving 3 months' notice).
Totals bearing interest	1,004,421 14 2	7,658,471 18 11	36,078,504 4 3	19,300,000 0 0	64,041,397 17 4	311,668,136 39	
Total interest	25,110 10 10	229,754 3 2	1,262,747 12 11	772,000 0 0	2,289,612 6 11	11,142,780 12	

Appendix No. 3

STATEMENT showing the portion of the Funded Debt of Canada payable in New York, March 31, 1928, and the annual interest payable thereon.

—	Bearing 4½ per cent interest	Bearing 5 per cent interest	Bearing 5½ per cent interest	Total	Maturing
	$ cts.	$ cts.	$ cts.	$ cts.	
Loan of 1915-35	.....	874,000 00	.....	874,000 00	Aug. 1, 1935.
Public Service Loan of 1916—Due 1931	.....	25,000,000 00	.....	25,000,000 00	April 1, 1931.
Loan of 1919-29	.....	.....	60,000,000 00	60,000,000 00	Aug. 1, 1929.
Loan of 1922-52	.....	100,000,000 00	.....	100,000,000 00	May 1, 1952.
Ten year Bonds due Feb. 1, 1936	40,000,000 00	.....	.....	40,000,000 00	Feb. 1, 1936.
	40,000,000 00	125,874,000 00	60,000,000 00	225,874,000 00	
Total interest	1,800,000 00	6,293,700 00	3,300,000 00	11,393,700 00	

Appendix No. 4

STATEMENT of the Consolidated Fund of Canada on March 31, 1928.

—	—	Dr.	Cr.
	$ cts.	$ cts.	$ cts.
To balance as per Public Accounts, 1926-27	.....	790,026,389 76	
To amount of expenditures for 1927-28—			
Ordinary Expenditures.....(details on page 4)	.....	336,167,960 98	
Special Expenditures—			
Adjustment of War Claims...(details on page 31)	.....	1,860,985 25	
Cost of Loan Flotations.....(details on page 32)	.....	13,057 70	
Miscellaneous Charges—			
Home Bank Depositors Relief Act, 15-16 Geo. V, chap. 45	205,032 55		
Civil Service Superannuation Act, 1924, Chap. 24, R.S. 1927. (Government contribution to the fund)	1,402,210 32		
Contribution of W. C. Acker to Superannuation Fund No. 1, from April 1, 1890, to September 30, 1905, together with interest thereon at 4 per cent transferred to Civil Service Superannuation Act 1924, O.C. 129/2275 November 28, 1927	268 99		
Advance made to O. M. Biggar for expenses in connection with arguing the appeal before the Privy Council in the case of Macdonald and Canadian National Railways and Luscar Collieries, Limited	1,000 00		
The Honourable Provincial Treasurer of British Columbia on account of head taxes collected upon Chinese during the fiscal year 1923-24	19,414 00		
Soldier Settlement Board—Amount written off loans to Soldier Settlers for purchase of live stock as provided for by Chap. 53 of the Statutes of 1925	3,240 16		
Soldier Settlement Board—Amount written off loans to Soldier Settlers for purchase of land as provided for by Chap. 68 of the Statutes of 1927	61,087 75		
		1,692,253 77	
By amount of revenues for 1927-28—			
Ordinary Revenues—.....(details on page 5)	.....	.....	422,717,982 68
Special Receipts—			
Adjustment of War Claims, refunds of previous years' expenditure	.....	.....	204,974 25
Refund of expenditure incurred by Department of National Defence between June 12, 1925, and August 24, 1925, for troops sent to Cape Breton, N.S., for strike duty	.....	.....	133,116 73
German Reparation payments under Dawes plan	.....	.....	3,002,047 78
German Reparation payments—pre-Dawes	.....	.....	3,789,430 00
By Balance, Consolidated Fund, March 31, 1928	.....	.....	699,913,096 02
		1,129,760,647 46	1,129,760,647 46

Appendix No. 5

Sinking Funds.

To whom paid	Loans	Nature of Investment	Rate of Interest	Amount Purchased	Total
		Canadian Securities	%	$ cts.	$ cts.
Sundry persons..	Loan of 1909 -34	Loan of 1897	2½	113,901 73	
		Loan of 1888	3	17,875 89	
		Loan of 1909-34	3½	306,120 71	
		Loan of 1930-50	3½	254,207 16	
					692,105 49
Sundry persons.	Loan of 1930 -50	Loan of 1897	2½	130,048 36	
		Loan of 1888	3	240,013 50	
		Loan of 1909-34	3½	9,596 80	
		Loan of 1930-50	3½	1,038,539 71	
		Loan of 1940-60	4	293,176 10	
					1,711,374 47
Sundry persons.	Loan of 1940 -60	Loan of 1897	2½	216,923 23	
		Loan of 1888	3	224,877 97	
		Loan of 1909-34	3½	204,281 52	
		Loan of 1930-50	3½	223,123 02	
		Loan of 1940-60	4	145,999 99	
					1,015,205 73
					3,418,685 69

Appendix No. 6

STATEMENT showing expenditure on account of Civil Government and Miscellaneous Services by Departments for 1927-28

—		Civil Government		Miscellaneous			
		Salaries	Contingencies	Gratuities to Families of Deceased Employees (Statutory)	Unforeseen Expenses	Flat Increase in Salary	General
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
The Governor General		48,666 66					
The Lieutenant-Governor of—							
Alberta	$ 9,000 00						
British Columbia	9,000 00						
Manitoba	9,000 00						
New Brunswick	9,000 00						
Nova Scotia	9,000 00						
Ontario	10,000 00						
Prince Edward Island	7,000 00						
Quebec	10,000 00						
Saskatchewan	9,000 00						
		81,000 00					
Departments—							
Agriculture		772,341 27	129,645 11	2,780 00	.....	73,530 38	1,000 00
Archives		66,515 06	24,796 78	.....	.....	4,080 00	94,746 04
Auditor General's Office		332,814 71	32,387 68	120 00	.....	.....	
Civil Service Commission		217,535 00	62,696 92	500 00	.....	5,695 86	
External Affairs		108,328 47	30,470 35	.....	20,297 62	228 87	355,681 63
Finance		394,740 00	39,607 07	.....	5,600 00	5,152 10	271,317 64
" Inspector General of Banks		15,000 00	4,717 14	.....	.....	.....	
Office of the Secretary to the Governor General		34,115 00	70,658 34	.....	1,500 00	780 00	
Government Contracts Supervision Committee		.....	.....	.....	.....	.....	19,526 31
Health		172,007 73	59,657 11	1,796 66	.....	.....	55,000 00
High Commissioner's Office		50,500 00	63,056 78	.....	.....	.....	
Immigration and Colonization		275,850 00	37,566 16	1,293 33	.....	26,307 67	
Indian Affairs		156,552 50	17,368 81	600 00	.....	27,403 82	
Insurance		83,080 00	57,814 85	270 00	.....	141 67	12,942 89
Interior		1,441,776 73	88,369 53	2,990 00	.....	63,836 54	
Justice		269,083 42	36,542 06	8,833 32	.....	49,910 41	74,476 97
Labour		204,368 04	24,985 77	.....	.....	240 00	
Legislation		.....	.....	1,336 66	.....	2,240 00	15,956 19

Appendix No. 6—Concluded

STATEMENT showing expenditure on account of Civil Government and Miscellaneous Services by Departments for 1927-28—Concluded

—	Civil Government		Miscellaneous			
	Salaries	Contingencies	Gratuities to Families of Deceased Employees (Statutory)	Unforeseen Expenses	Flat Increase in Salary	General
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Marine and Fisheries	506,831 92	81,437 56	6,837 23	1,673 46	100,972 07	4,755 60
Mines	554,370 51	5,172 40	168 88	.....	.....	18,848 00
National Defence	703,966 00	69,992 17	1,680 00	84,959 96	35,628 64	756,486 60
National Revenue	602,704 56	27,425 73	21,389 96	.....	137,663 47	1,200 00
Post Office	1,250,419 00	156,134 39	13,656 67	.....	620,383 21	
Printing and Stationery	77,562 33	13,496 95	1,041 34	.....	2,340 00	
Privy Council	48,385 00	4,600 03	216 66	9,675 99	250 50	
Public Works	650,078 95	62,885 19	7,511 47	7,325 62	60,248 43	33,631 42
Railways and Canals	260,410 00	35,498 11	4,492 82	.....	3,770 33	63,200 53
Royal Canadian Mounted Police	44,440 00	4,430 25	.....	.....	.....	500 00
Secretary of State	208,625 21	38,697 59	633 33	.....	10 00	14,243 39
Soldiers' Civil Re-establishment	29,995 49	.....	2,212 40	.....	.....	
Soldier Settlement Board	.....	.....	.....	.....	52,438 11	
Trade and Commerce	596,984 47	36,981 18	5,790 00	.....	100,478 92	
Miscellaneous, per schedule No. 22, Page 31	.....	.....	.....	.....	.....	2,702,539 16
	10,259,048 03	1,317,092 01	86,150 73	131,032 65	1,373,731 00	4,496,052 37
		10,259,048 03				
Total expenditure chargeable to Civil Government	.....	11,576,140 04				
						1,373,731 00
						131,032 65
						86,150 73
Total expenditure chargeable to Miscellaneous Services	.....	.....	.....	.....	.....	6,086,966 75

Appendix No. 7

Interest on Public Debt

To Whom Paid	Description	Time for which Interest was paid	Date to which Interest was paid	Rate of Interest	Amount of Principal	—	Interest Paid	Total
	Funded Debentures and Inscribed Stock			p.c.	$ cts.	$ cts.	$ cts.	$ cts.
	Payable in London							
Bank of Montreal	Loan of 1884 Unguaranteed	1 year	Dec. 1, 1927	3½	23,467,206 27		821,352 20	
"	" 1888 "	1 "	Jan. 1, 1928	3	8,071,230 16		242,136 90	
"	" 1892 "	1 "	Jan. 1, 1928	3	18,250,000 00		547,500 00	
"	" 1894 "	1 "	Jan. 1, 1928	3	10,950,000 00		328,500 00	
"	" 1897 "	1 "	April 1, 1928	2½	4,888,185 64		122,204 62	
"	" 1930–50 "	1 "	Jan. 1, 1928	3½	137,058,841 00		4,797,059 42	
"	" 1940–60 "	1 "	April 1, 1928	4	93,926,666 66		3,757,066 66	
"	Canadian Pacific Ry. Land Grant Loan Unguaranteed	1 "	Jan. 1, 1928	3½	15,056,006 66		526,960 22	11,142,780 02
	Payable in Canada							
Sundry Persons	Stock A	1 "	April 1, 1928	6	4,000 00		240 00	
"	" A	1 "	Nov. 1, 1927	3½	1,000 00	35 00		
"	" A	Various		3½		12 56		
							47 56	
"	" B	½ year	May 1, 1927	3½	24,100 00	421 75		
"	" B	½ "	Nov. 1, 1927	3½	20,800 00	364 00		
"	" B	Various		3½		51 52		
							837 27	
"	" C	1 year	Nov. 1, 1927	3½	48,666 67		1,703 34	
Hon. Provincial Treasurers								
Alberta	Debenture Stock (School Lands)	1 "	April 1, 1928	5	* 7,839,000 00	390,125 00		
Manitoba	" "	1 "	April 1, 1928	5	* 5,850,000 00	292,350 00		
Saskatchewan	" "	1 "	April 1, 1928	5	* 15,275,000 00	752,700 00		
							1,435,175 00	
Sundry Persons	War Savings Certificates	Various	Various		* 20,155 00		3,237 85	
"	War Savings Stamps	"	"		* 104,829 50		11,355 50	
"	Dominion of Canada Savings Certificates	"	"		* 19,825 00		5,349 75	
"	Compensation to Seigneurs	1 year	Jan. 1, 1928	6	* 12,140 15		604 64	
"	Compensation to Townships	1 "	Jan. 1, 1928	5	153 00		7 64	
"	War Loan 1916–31	1 "	April 1, 1928	5	52,931,600 00		2,646,580 00	
	Carried forward						4,105,138 55	11,142,780 02

Appendix No. 7—Concluded

Interest on Public Debt—Concluded

To Whom Paid	Description	Time for which Interest was paid	Date to which Interest was paid	Rate of Interest	Amount of Principal	—	Interest Paid	Total
				p.c.	$ cts.	$ cts.	$ cts.	$ cts.
	Brought forward						4,105,138 55	11,142,780 02
	Funded—*Payable in Canada*—Concluded—							
Sundry Persons	War Loan 1917–37	1 year	Mar. 1, 1928	5	90,166,900 00		4,508,345 00	
"	Victory Loan 1917	1 "	Dec. 1, 1927	5½	299,736,100 00		16,485,519 87	
"	" 1918	1 "	Nov. 1, 1927	5½	446,658,800 00		24,566,241 36	
"	" 1919	1 "	Nov. 1, 1927	5½	511,910,650 00		28,155,097 86	
"	Renewal Loan, 1922	1 "	Nov. 1, 1927	5½	102,393,550 00		5,631,650 95	
"	Refunding Loan, 1923	1 "	Oct. 15, 1927	5	200,000,000 00	10,000,000 00		
"	" Bonds redeemed before maturity	Various	Various	5	6,254,000 00	134,153 21		
							10,134,153 21	
"	Refunding Loan, 1924	1 year	Oct. 15, 1927	4½	50,000,000 00		2,250,000 00	
"	" 1925–40	1 "	Mar. 1, 1928	4½	75,000,000 00		3,375,000 00	
"	Treasury Notes 1924	1 "	Nov. 15, 1927	4	8,000,000 00		320,000 00	
"	Refunding Loan, 1926	1 "	Feb. 1, 1928	4½	65,000,000 00		2,925,000 00	
								102,456,146 80
	Payable in New York							
Sundry Persons	Bond Loan 1915–35	1 year	Feb. 1, 1928	5	874,000 00		43,700 00	
"	Public Service Loan 1916	1 "	April 1, 1928	5	25,000,000 00		1,250,000 00	
"	Bond Loan 1919–29	1 "	Feb. 1, 1928	5½	60,000,000 00		3,300,000 00	
"	Loan of 1922–52	1 "	Nov. 1, 1927	5	100,000,000 00		5,000,000 00	
"	One year Notes, 1925	1 month	April 1, 1926	4	5,000 00		16 67	
"	Ten Year Notes 1926–36	1 year	Feb. 1, 1928	4½	40,000,000 00		1,800,000 00	
								11,393,716 67
	Unfunded							
	Temporary Loans							
Custodian of Enemy Property	Debenture Stock Payable on Demand	1 "	April 1, 1928	5	200,000 00			10,000 00
	Savings Banks							
Sundry Persons	Post Office Savings Banks	1 "	April 1, 1928	3	* 23,463,209 91		690,037 62	
"	Dominion Government Savings Banks	1 "	April 1, 1928	3	* 7,640,566 35		224,794 92	
								914,832 54
	Trust Funds							
Indian Funds	Trust Funds	1 "	April 1, 1928	6	* 1,089,844 37	65,390 65		
"	"	1 "	April 1, 1928	5	* 11,771,109 32	588,555 47		
							653,946 12	

Hon. Prov. Treas., Ontario	Trust Fund, proportion of Common School Fund	1 year	Jan. 1, 1928	5		73,675 46		
Hon. Prov. Treas., Quebec	Trust Fund, proportion of Common School Fund	1 "	Jan. 1, 1928	5		59,298 73	132,974 19	
Hon. Prov. Treas., Alberta	Alberta School Lands	1 "	April 1, 1928	5	* 439,645 61	10,731 19		
Hon. Prov. Treas., Manitoba	Manitoba School Lands	1 "	April 1, 1928	5	* 14,858 95	688 23		
Hon. Prov. Treas., Saskatchewan	Saskatchewan School Lands	1 "	April 1, 1928	5	* 404,674 47	12,155 02	23,574 44	
Land Assurance Fund	Trust Fund	1 "	April 1, 1928	3	* 11,364 20		329 98	
Sundry Persons	Contractors Securities	1 "	April 1, 1928	3	* 1,061,093 51		29,480 68	
"	Decayed Pilots Fund	1 "	April 1, 1928	3	* 18,846 62		406 36	
"	Halifax Pilots Pension Fund	1 "	April 1, 1928	3	* 7,536 80		170 38	
"	St. John Pilots Pension Fund	1 "	April 1, 1928	3	* 2,646 32		60 00	
"	Sydney Pilots Pension Fund	1 "	April 1, 1928	3	* 8,698 18		212 10	
"	Burrard Dry Dock Pontoons	1 "	April 1, 1928	3	* 7,418 96		165 12	
Militia Council	Strathcona Trust Fund	1 "	Nov. 12, 1927	4	300,000 00	12,000 00		
"	" "	1 "	Nov. 14, 1927	4	200,000 00	8,000 00	20,000 00	
Regimental Funds	Trust Fund	1 "	April 1, 1928	3	* 20,000 00		3,582 55	864,901 92
	Bank Circulation Redemption Fund							
Sundry Banks	Bank Circulation Redemption Fund	1 "	July 1, 1927	3	* 5,929,219 02			172,830 21
	Insurance and Superannuation Funds							
Sundry Persons	Civil Service Insurance Fund	1 "	April 1, 1928	6	* 4,418,854 91		269,385 54	
"	Government Annuities	1 "	April 1, 1928	4	* 14,719,484 26		493,964 97	
"	Retirement Fund	1 "	Jan. 1, 1928	5	* 4,757,505 45		226,535 86	
"	Returned Soldiers Insurance Fund	1 "	April 1, 1928	4	* 5,964,246 99		212,247 32	
"	Civil Service Superannuation Act, 1893, Now Chap. 17, R.S. 1906—Fund No. 2	1 "	April 1, 1928	6	* 1,897,316 79		108,642 06	
"	Civil Service Superannuation Act, 1924, Now Chap. 24, R.S. 1927—Fund No. 5	1 "	April 1, 1928	4	* 19,881,701 96		666,960 67	1,947,736 42
								128,902,944 58

*Balance March 31, 1928.

Appendix No. 8

Charges of Management

To Whom Paid	Service	$ cts.	$ cts.
	Savings Banks and Offices of the Assistant Receivers General		
	Assistant Receiver General's Office, Calgary, Alta.		
G. S. Nicol	Salary April 1, 1927 to March 31, 1928	3,180 00	
James Parry	" " 1, 1927 " 31, 1928	2,160 00	
R. N. Genge	" " 1, 1927 " 31, 1928	1,635 00	
R. T. Waymark	" " 1, 1927 " 31, 1928	1,440 00	
A. Sutherland	" " 1, 1927 " 31, 1928	870 00	
J. Gofsky	" July 25, 1927 to Aug. 13, 1927	42 39	
		9,333 39	
	Contingencies, including printing and stationery	341 20	
			9,674 59
	Assistant Receiver General's Office, Charlottetown, P.E.I.		
P. Pope	Salary April 1, 1927 to March 31, 1928	2,900 00	
D. A. McKinnon	" 1, 1927 " 31, 1928	1,920 00	
H. S. Stewart	" 1, 1927 " 31, 1928	1,620 00	
H. T. Currie	" 1, 1927 " 31, 1928	1,380 00	
		7,820 00	
	Contingencies, including printing and stationery	257 81	
			8,077 81
	Assistant Receiver General's Office, Halifax, N.S.		
A. C. Johnston	Salary April 1, 1927 to March 31, 1928	2,970 00	
R. W. Congdon	" 1, 1927 " 31, 1928	2,190 00	
F. J. Wilks	" 1, 1927 " 31, 1928	1,800 00	
G. D. Hamlin	" 1, 1927 " 31, 1928	1,575 00	
J. H. Webber	" 1, 1927 " 31, 1928	1,260 00	
A. M. Burgoyne	" 1, 1927 " 31, 1928	1,350 00	
B. Burgoyne	Salary July 11, 1927 to July 31, 1927	50 80	
		11,195 80	
	Contingencies, including printing and stationery	450 49	
			11,646 29
	Assistant Receiver General's Office, Montreal, Que.		
Montreal City and District Savings Bank, Montreal, Que.	Amount paid to this institution for acting as Assistant Receiver General for year ended March, 31, 1928	20,000 00	
	Contingencies, including printing and stationery	999 24	
			20,999 24
	Assistant Receiver General's Office, Regina, Sask.		
W. Winsby	Salary Oct. 1, 1927 to March 31, 1928	1,530 00	
Wm. Morton	Salary April 1, 1927 to Sept. 30, 1927	1,470 00	
E. P. Blyth	" 1, 1927 to March 31, 1928	2,190 00	
G. M. Bury	" 1, 1927 " 31, 1928	1,755 00	
N. J. Lobban	" 1, 1927 " 31, 1928	855 00	
		7,800 00	
	Contingencies, including printing and stationery	414 46	
			8,214 46
	Carried forward		58,612 39

Appendix No. 8—Continued

Charges of Management—*Continued*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward		58,612 39
	Assistant Receiver General's Office, St. John, N.B.		
J. E. Wilson	Salary April 1, 1927 to March 31, 1928	3,180 00	
E. H. Cameron	" 1, 1927 " 31, 1928	2,340 00	
G. T. Corbett	" 1, 1927 " 31, 1928	1,635 00	
H. W. Thompson	" 1, 1927 " 31, 1928	1,110 00	
F. J. Ord	" 1, 1927 " 31, 1928	1,056 94	
H. P. Humphrey	" 1, 1927 " 31, 1928	1,080 00	
		10,401 94	
	Contingencies, including printing and stationery	314 15	
			10,716 09
	Assistant Receiver General's Office, Toronto, Ont.		
K. Frederickson	Salary April 1, 1927 to March 31, 1928	4,020 00	
S. A. Staden	" 1, 1927 " 31, 1928	3,060 00	
J. J. Hannon	" 1, 1927 " 31, 1928	1,845 00	
G. M. Dibble	" 1, 1927 " 31, 1928	900 00	
M. A. M. Livingstone	" 1, 1927 " 31, 1928	1,395 00	
Alf. Maude	" 1, 1927 " 31, 1928	1,395 00	
J. H. O'Neil	" 1, 1927 " 31, 1928	1,395 00	
Jas. Marsh	" 1, 1927 " 31, 1928	1,260 00	
G. A. Ivey	" 1, 1927 " 31, 1928	1,620 00	
A. V. Spencer	" 1, 1927 " 31, 1928	720 00	
A. McDonald	" 1, 1927 to Sept. 30, 1927	780 00	
C. T. Porter	" 1, 1927 to Aug. 9, 1927	579 19	
E. Henderson	" 1, 1927 to Aug. 17, 1927	523 06	
E. F. Grandy	" 1, 1927 to April 4, 1927	10 66	
C. M. Leslie	" 1, 1927 to June 30, 1927	405 00	
E. E. Gibbons	" 1, 1927 to April 13, 1927	26 00	
P. MacLeod	Salary Aug. 4, 1927 to March 31, 1928	711 29	
B. A. Thompson	Salary Dec. 27, 1927 " 31, 1928	315 32	
L. M. Wicks	Salary April 30, 1927 to July 23, 1927	249 77	
F. Goodman	Salary June 2, 1927 to March 31, 1928	897 00	
R. J. Lillie	" 29, 1927 " 31, 1928	544 00	
N. Prousky	Salary July 20, 1927 to Nov. 5, 1927	313 84	
J. F. Coleman	" 25, 1927 to Feb. 11, 1928	594 45	
H. R. Roberts	" 25, 1927 to March 31, 1928	740 32	
F. E. Ruhl	" 27, 1927 " 31, 1928	938 55	
W. M. Donald	Salary Feb. 17, 1928 " 31, 1928	130 34	
J. N. D. Falls	" 18, 1928 " 31, 1928	113 10	
A. B. Hounsom	Salary Mch 16, 1928 " 31, 1928	59 35	
		25,541 24	
	Contingencies, including printing and stationery	1,915 34	
			27,456 58
	Assistant Receiver General's Office, Victoria, B.C.		
D. B. McConnan	Salary April 1, 1927 to March 31, 1928	3,180 00	
G. Watts	" 1, 1927 " 31, 1928	1,950 00	
G. H. Llewellyn	" 1, 1927 " 31, 1928	1,635 00	
A. W. Webb	" 1, 1927 " 31, 1928	1,320 00	
N. D. Bates	" 1, 1927 " 31, 1928	1,080 00	
W. J. Mullin	" 1, 1927 " 31, 1928	1,080 00	
E. Dumbleton	Salary Sept. 3, 1927 to Sept. 24, 1927	55 00	
		10,300 00	
	Contingencies, including printing and stationery	597 50	
			10,897 50
	Carried forward		107,682 56

Appendix No. 8—Continued

Charges of Management—*Continued*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward		107,682 56
	Assistant Receiver General's Office, Winnipeg, Man.		
Wm. Morton	Salary Oct. 1, 1927 to March 31, 1928	1,590 00	
W. Winsby	Salary April 1, 1927 to Sept. 30, 1927	1,500 00	
S. J. Perkins	" 1, 1927 to March 31, 1928	2,040 00	
T. Knight	" 1, 1927 " 31, 1928	1,920 00	
E. W. H. Armstrong	" 1, 1927 to Jan. 31, 1928	1,666 60	
F. D. Ross	" 1, 1927 to March 31, 1928	1,455 00	
H. J. Fraser	" 1, 1927 " 31, 1928	1,080 00	
S. A. Gray	Salary May 23, 1927 " 31, 1928	926 13	
M. E. Bowyer	Salary April 1, 1927 " 31, 1928	1,080 00	
G. L. Bamford	" 1, 1927 to May 31, 1927	210 00	
		13,467 73	
	Contingencies, including printing and stationery	536 21	
			14,003 94
	Savings Banks		
	Contingencies, including printing and stationery		69 09
			121,755 59
	Recapitulation		
	Salaries, Offices of the Assistant Receivers General	95,860 10	
	Amount paid to the Montreal City and District Savings Bank, Montreal, Quebec, for acting as Assistant Receiver General at Montreal	20,000 00	
	Contingencies, including printing and stationery	5,895 49	
			121,755 59
	English Bill Stamps, Postage, etc.		
Bank of Montreal, London, England	Bill Stamps	1,555 95	
" " "	Postage	929 27	
" " "	Composition of stamp duty	167 90	
		2,653 12	
" " "	Less—Sundry fees for issuing stock certificates to bearer	1,402 57	
			1,250 55
	Commission for Payment of Interest on Public Debt, etc.		
Bank of Montreal, London, England	Commission and brokerage on sinking funds	8,546 68	
P. S. Ross & Sons	Auditing	833 50	
Bank of Montreal, London, England	For services as fiscal agents in London, England, for the year ended December 31, 1927, at rate of £150 per million of debt	46,750 21	
Sundry Banks, New York	Commission for cashing Dominion of Canada coupons and registered interest	15,074 29	
Bank of Montreal, New York	Fees for registration of bonds domiciled in New York	5,750 00	
Sundry Banks	⅛ of one per cent commission for cashing Dominion of Canada coupons	15,226 87	
			92,181 55
	Carried forward		215,187 69

Appendix No. 8—Continued

Charges of Management—*Continued*

To Whom Paid	Service		$ cts.	$ cts.
	Brought forward			215,187 69
	Printing Dominion Notes, etc.			
Canadian Bank Note Co., Ltd., Ottawa, Ont.	Printing Dominion Notes, including Sales Tax		487,470 22	
" " "	Ink, etc.		131 87	
" " "	Repairs to printing press		206 45	
Ault & Wiborg Co. Toronto Ont.	Regrinding and sealing press rollers		6 00	
Ayers Ltd., Lachute Mills, Que.	Groundwood felt		115 44	
Canadian National Railway	Freight		30	
Capital Wire Cloth & Mfg. Co., Ltd., Ottawa, Ont.	Recovering cylinder mould		100 00	
Imperial Oil Co., Ltd., Toronto, Ont.	Oil, grease, etc.		11 75	
F. Lake Mfg. Co., Ottawa, Ont.	Oil		14 25	
Laurentian Stone Co., Ltd., Ottawa, Ont.	Lime		35 41	
Miller & Richard, Toronto, Ont.	Repairs to press		27 32	
Mahoney & Rich, Ottawa, Ont.	Cartage		30	
Ottawa Drug Co., Ltd., Ottawa, Ont.	Soda Ash		197 58	
Pritchard-Andrews Co., Ltd., Ottawa, Ont.	Discs and dies		49 92	
J. S. Robertson, Montreal, Que.	Cylinder press rollers		159 21	
M. J. Hickson	Salary, April 1, 1927 to Sept. 15, 1927		874 67	
F. Rowe	" 1, 1927 to Mar. 31, 1928		1,680 00	
E. J. Theobalds	" 1, 1927 to Mar. 31, 1928		1,440 00	
P. S. Harper	" 1, 1927 to Mar. 31, 1928		1,200 00	
B. Becker	" 1, 1927 to Mar. 31, 1928		720 00	
D. Campbell	" 1, 1927 to Mar. 31, 1928		720 00	
F. Jones	" 1, 1927 to Mar. 31, 1928		718 07	
Y. Lamoureux	" 1, 1927 to Mar. 31, 1928		709 00	
M. Paget	" 1, 1927 to Mar. 31, 1928		720 00	
D. M. Racine	" 1, 1927 to Mar. 31, 1928		720 00	
A. Valliere	" 1, 1927 to Oct. 13, 1927		383 23	
M. B. Little	Salary, Aug. 15, 1927 to Mar. 31, 1928		452 90	
A. B. Little	" 16, 1927 to Mar. 31, 1928		449 97	
M. C. Burton	" 17, 1927 to Mar. 31, 1928		446 03	
M. Durocher	Salary, May 28, 1927 to Sept. 30, 1927		634 78	
			500,394 67	
	Less—Amount charged to vote 535. To provide for flat increases in salary		394 67	
				500,000 00
	Printing, Advertising, Express, etc.			
Bank of Montreal, New York	Assay Office charges		573 75	
" "	Packing cases		11 70	
Bank of Montreal, London, England	$\frac{1}{16}$ of one per cent commission for handling Roumanian and Greek coupons		831 24	
" "	Advertising		415 23	
" "	Printing and Stationery		1,098 28	
" "	Express		3 40	
" "	Cables		8 94	
Bank of Montreal, Ottawa, Ont.	Shipping charges		4 44	
Department of Public Printing and Stationery, Ottawa, Ont.	Printing and Stationery		11,985 88	
Sundry Express Companies	Express	$ 76,011 68		
	Less refunds	754 75		
			75,256 93	
Courtney, Sears & Brennan.	Insurance	$ 207 43		
Greene & Robertson	"	6,005 44		
		6,212 87		
	Less refunds	551 08		
			5,661 79	
	Carried forward		95,851 58	715,187 69

Appendix No. 8—Concluded

Charges of Management—*Concluded*

To Whom Paid	Service	$ cts.	$ cts.
	Brought forward	95,851 58	715,187 69
	Printing, Advertising, Express, etc.—Concluded		
Family Herald and Weekly Star, Montreal Que.	Advertising	1,512 00	
Sundry	Telegrams	49 20	
Abbott Coin Counter Company, 143rd St. and Wales Ave., New York, N.Y.	Counting Machine, paper, etc.	404 22	
Dr. J. T. Basken, Ottawa, Ont.	Professional services	5 00	
Canadian Fairbanks Morse, Co., Ltd., Montreal, Que.	Rubber tires	1 71	
Collector of Customs, Ottawa, Ont.	Duty and Sales Tax, etc.	67 76	
Costello, Crowe, Bellamy, Ottawa, Ont.	Repairs to motor	9 50	
Grant, Holden, Graham, Ltd., Ottawa, Ont.	Coin bags	473 20	
Mahoney & Rich, Ottawa, Ont.	Freight	4 51	
McKinley & Northwood, Ottawa, Ont.	Iron boxes	31 65	
O. B. McClintock Co., Minneapolis, Minn.	Inspection of burglar alarm	50 00	
J. M. Mossman Co., New-York, N.Y.	Inspection of time locks	22 00	
Pritchard - Andrews Co., Ltd., Ottawa, Ont.	Wax seal and repairs	9 40	
Porter Safety Seal Co., Chicago, Ill.	Porter Safety Seal implements and seals	200 50	
Thornton & Truman, Ottawa, Ont.	Repairs, etc.	351 40	
L. E. Waterman Co., Ltd., Montreal, Que.	Repairs to fountain pens	18 14	
M. J. Wilson & Sons, Ottawa, Ont	Leather baggage tags	7 35	
Sundry	Maintenance and repairs to departmental car and truck	1,077 79	
Sundry	Office Contingencies, Currency Branch	47 19	
Loss on shipment of U.S. Coin by Dominion Assay Office, Vancouver, B.C.		72 72	
C. E. Campbell	Travelling Expenses	93 19	
V. Coe	" "	269 46	
E. Davies	" "	151 05	
K. Frederickson	" "	185 09	
A. E. Jacques	" "	122 55	
A. J. Locke	" "	234 66	
J. W. MacFarlane	" "	464 55	
S. P. McCavour	" "	201 75	
G. MacGougan	" "	87 37	
W. Morton	" "	840 47	
H. S. Narraway	" "	89 35	
S. J. Perkins	" "	281 63	
J. U. Ranger	" "	498 90	
M. Tierney	" "	357 74	
A. Williams	" "	227 67	
W. Winsby	" "	319 37	
F. M. Peters	" "	66 00	
J. P. Melvin	" "	650 95	
G. A. Morrison	" "	59 45	
C. E. Clarke (Chauffeur)	Salary April 1, 1927 to Mar. 31, 1928	1,620 00	
W. A. Bradley (Chauffeur)	Salary April 1, 1927 to Mar. 31, 1928	1,770 00	108,858 02
	Salary and contingencies of Walter Duncan, Special Investigating Officer under the direction of the Minister of Finance		
Walter Duncan	Salary April 1, 1927 to Mar. 31, 1928	3,670 00	
	Contingencies	1,027 87	4,697 87
	Clerical assistance in connection with the transfer and registration of Bonds		
Sundry persons	Clerical assistance	.....	55,787 95
			884,531 53

Appendix No. 9

Premium, Discount and Exchange Expenditure.

—	Rate	Amount Purchased	Amount of Premium	Total
	%	$ cts.	$ cts.	$ cts.
Premium on Bonds of the 1923-28 Refunding Loan purchased before maturity	100·445	180,000 00	801 00	
	100·450	650,000 00	2,925 00	
	100·475	1,325,000 00	6,293 75	
	100·50	2,399,000 00	11,995 00	
	100·525	1,700,000 00	8,925 00	
				30,939 75
Premium on Sterling Exchange purchased	4·87 5/16	100,000 00	645 83	
	4·8730	100,000 00	633 33	
	4·8740	250,000 00	1,833 33	
	4·87 7/16	250,000 00	1,927 08	
	4·87½	750,000 00	6,249 99	
				11,289 56
Discount and Exchange on sundry items	.....	.....	.....	4 02
				42,233 33

Appendix No. 10

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927

Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.
	Civil Service Superannuation and Retirement Act, 1870, Chap. 17, R.S. 1906	
1912	Abbott, S. A.	1,746 60
1922	Aikens, J.	1,941 35
1922	Ainsborough, Thos.	910 00
1921	Allan, F. J.	2,375 33
1918	Allen, Geo. G.	809 03
1904	Allen, H. S.	694 38
1918	Ailwell, R. J.	525 84
1920	Almon, A. W.	1,120 00
1910	Ami, Henry	1,478 40
1921	Amor, Wm.	1,042 60
1922	Anderson, F. C.	1,559 08
1895	Archambault, Marie P.	257 83
1924	Archambault, R.	909 96
1904	Archer, Wm.	176 00
1905	Ardagh, Henry	388 66
*1922	Arland, W. H.	525 00
1923	Armstrong, Thos.	930 00
1923	Ashby, A. H.	960 60
1922	Ashe, Ed.	910 00
1922	Ashmead, H. A.	855 48
1915	Asselin, J. E.	840 00
1922	Ayotte, J. E.	890 66
1911	Backhouse, Wm.	455 00
1897	Bailey, Geo. O.	360 00
*1897	Balderson, J. H.	625 57
1911	Baldwin, H. A.	648 00
*1921	Bale, Thos.	227 92
1922	Ball, Thos.	818 40
1920	Ballantine, Elizabeth	946 17
1923	Barber, K. A.	1,367 33
1924	Barcelo, Edouard	2,940 00
1917	Barrett, John K.	2,240 00
1920	Bathurst, Jas. W.	980 00
1904	Bayly, L. D.	342 84
1920	Beahen, Denis	902 22
1908	Beale, Thomas	408 47
1923	Beard, F.	2,215 66
1923	Beatty, A.	1,260 00
1906	Beaudry, P. A. L. A.	432 00
1922	Beddoe, C. H.	2,555 96
1924	Beers, J. M.	1,036 00
1903	Belford, Ethel	314 66
1922	Bell, John	700 00
*1911	Belleau, R. A. E.	104 00
1913	Bellerive, George	341 25
1904	Benjamin, E. H.	985 83
1897	Bennett, J. H.	540 00
1922	Bennett, W. E.	2,102 63
*1919	Benson, Martin	292 73
1915	Bérubé, Pierre A.	501 48
*1925	Bickle, J. W.	146 12
1919	Binks, Geo. J.	2,344 92
1923	Bishop, R. S.	1,958 04
1914	Blackadar, A. K.	2,485 00
1920	Blair, H. C.	2,085 42
1920	Bliss, T. A. D.	1,960 00
1905	Blomfield, Geo. H.	152 04
1922	Blondeau, D. S.	1,642 08
1922	Boddy, J. S.	1,410 16
1925	Bolger, M. K.	1,337 00
1923	Bollard, J. H.	1,936 56
1921	Booth, Geo.	1,120 00
1918	Borden, J. W.	2,077 83
1917	Bourgeois, Joseph	276 00
1921	Bouteiller, G. A.	1,893 84
1920	Boville, T. C.	3,733 33
*1917	Bowell, John M.	700 03
1921	Bowman, A.	900 00
1908	Bowser, Francis	448 00
1897	Boys, T. R.	173 47
1905	Bradley, James	260 97
1922	Bray, S.	2,191 00
1916	Brennan, P. J.	1,179 75
1921	Brett, Wm.	1,054 90
1915	Briegal, Frederick	1,750 00
1915	Brophy, W. M.	686 40
1916	Brough, James S.	1,662 50
1917	Broughton, Jas. L.	1,435 56
1919	Brown, J. H.	1,697 50
1904	Buckley, Jas.	340 00
1921	Bull, G. H.	1,185 33
1913	Burrows, Wm.	482 02
1910	Bussell, John	309 03
1921	Butler, J.	1,042 22
1918	Butler, R. J.	1,238 08
1922	Cairns, A. W.	2,746 22
1901	Caldwell, Thos.	522 00
1916	Cameron, Alex. McK.	1,155 78
*1915	Campbell, J. J.	279 99
1921	Campbell, Jos. H.	951 00
1921	Caron, A. E.	1,950 66
1917	Carrier, Jos. E.	980 00
1911	Carty, Wm.	249 55
1911	Casault, Napoléon	560 00
1911	Chamberlain, A. J.	504 00
1922	Chamberlain, H.	679 92
1907	Chase, Isaac	840 00
1923	Cheyne, A. J.	1,092 00
1925	Chillas, J. P.	2,272 43
1910	Chubbuck, C. E. D.	1,373 75
1918	Churchill, James	840 00
1926	Clarke, Chas. F.	1,113 00
1921	Clarke, Geo.	583 33
1925	Clark, O. S.	1,020 79
1907	Clute, John S.	1,263 91
1924	Cochrane, J. B.	998 80
1905	Cochrane, W. C.	361 10
1920	Code, W. A.	1,411 66
1913	Coleman, Charles	726 00
1918	Coleman, Lilian	624 00
1918	Comer, Geo. W. H.	558 00
*1919	Connolly, Peter	746 64
1926	Conway, W. A.	1,876 00
1924	Cook, M. E.	1,369 66
1921	Cooper, W. J.	1,450 90
1916	Corbeil, Ed.	450 72
1923	Courtman, John	1,008 00
1906	Cowan, E.	387 00
*1914	Cowan, J. A.	772 83
1923	Cox. R. H.	1,176 00
1924	Cox, R. S.	1,267 00
1925	Crabbe, O. R.	1,064 00
1926	Crate, A. E.	1,467 50
1920	Creighton, H. S.	1,120 00
1909	Crisp, A. C.	840 00
1918	Crowe, Wm. J.	748 00
1920	Cunningham, F. H.	2,800 00
1910	Curran, Alfred	955 68
1918	Cushing, James J.	619 68
1924	Cushing, Jno.	882 00
1922	Cuthbert, W. J.	841 52
1906	Dale, Miss L. E.	329 33
1922	D'Aoust, Omer	872 67
1919	Davidson, J. J.	1,188 00
1923	Davison, L. D.	665 70
1924	Deacon, J. L.	1,386 00

Appendix No. 10—Continued

Amounts paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	Superannuation No. 1	$ cts.		Superannuation No. 1	$ cts.
1914	DeLaney, E. J.	939 17	1915	Gilkie, H. A.	303 36
1911	De Lisle, Joseph	1,013 28	1916	Gillespie, Ed.	700 00
1914	DeLong, Isaiah P. E.	430 70	*1901	Girard, F. X.	48 00
1923	Desaulniers, D. L.	2,656 50	1922	Gisborne, F. H.	4,200 00
1924	Desjardins, A. W.	1,120 00	1920	Glover, J. E.	342 72
1918	Devinney, F. J.	952 00	*1908	Gobeil, A.	1,260 00
1913	Dingman, N. J.	1,890 00	1921	Godwin, Jas.	806 40
1900	Dodds, E. W. K.	351 00	1922	Golden, J. J.	1,084 07
1920	Dodds, Jno.	1,270 80	1897	Gordon, J. McD.	785 33
1909	Doller, W. J.	526 20	*1894	Gouin, W. G.	100 00
1917	Doray, J. L. E.	980 00	1924	Goulet, I.	998 40
1913	Doucet, Eugène	1,032 50	1920	Gow, W. J.	1,526 38
*1914	Dougherty, W. A.	46 00	1918	Graham, Wm. J.	1,399 92
1924	Doyle, Mary C.	1,379 40	*1883	Grant, G. W.	37 50
*1920	Doyon, J. A.	489 99	1922	Gray, H. H. O.	1,470 00
1920	Driver, Thos.	1,337 78	1903	Grenier, Adolphe	151 32
*1921	Drouillard, A.	68 63	1921	Grimason, T.	1,400 00
1918	Drummond, Robt F.	1,057 44	1889	Grogan, S. P.	93 48
1922	Duboulay, A.	841 52	*1895	Guevremont, J. B.	140 00
1912	Duggan, E. J.	1,579 44	1922	Hale, J. S.	1,805 13
*1901	Duncan, R.	792 00	1914	Hall, William S.	768 48
1923	Duplessis, L. J. T. R.	2,013 60	1912	Hambly, P. H.	410 42
*1923	Durocher, J. B.	588 00	1919	Hanley, Arch'd	1,050 00
1922	Durston, R.	1,521 33	1922	Hanrahan, P.	1,174 45
1917	Eagleson, Wm. H.	1,470 00	1909	Harper, James F.	300 00
1919	Eaton, Wm. P.	980 00	1923	Harris, G. M.	1,848 00
1902	Eckersley, John	952 00	1904	Harris, J. H.	168 00
1922	Eckhardt, W. H. A.	1,764 00	1909	Hawkesworth, G. A.	677 52
1925	Edwards, E. T.	1,150 33	1922	Hayes, Jeremiah	817 47
1922	Elbourne, Geo.	1,035 14	1924	Hayes, John J.	1,200 72
1914	Ellis, Rachel G.	528 00	1905	Hayes, W. H.	609 96
*1897	Embury, W. J.	136 32	1914	Hayward, W. G.	446 64
1905	Farley, J. F.	728 00	1914	Heath, E. L.	760 29
1914	Fenerty, A.	896 91	1921	Heintz, R. M.	2,070 83
1921	Ferguson, Alex.	688 33	1918	Helliwell, H. N.	1,050 00
*1888	Ferguson, Horace A.	40 00	*1923	Heming, A. E.	1,225 00
*1922	Ferguson, J. C.	400 00	1914	Henry, K. J.	1,960 00
1912	Finnegan, Edward	550 00	1921	Hesson, C. A.	1,301 22
*1909	Firth, C. M.	102 70	1905	Higgins, Richard	228 92
1922	Fisher, C. E.	2,407 93	1920	Hill, W. B. A.	928 00
1922	Fleming, J. B.	1,960 00	1898	Hopkirk, J. E.	700 00
1923	Florence, C.	1,050 00	1923	House, W. H.	1,288 00
1909	Flynn, D. J.	680 56	*1922	Howard, J. P.	862 62
1926	Flynn, John	588 00	1887	Howe, Sydenham	1,215 96
1916	Flynn, Wm.	1,096 67	1897	Hudon, A.	400 00
1922	Forest, S.	921 60	1923	Huggan, Wm T.	1,973 36
1920	Fortier, L. M.	1,904 00	1904	Hunt, William Josiah	321 96
1924	Foster, A. B.	2,152 50	1921	Hutty, R. H. G.	1,042 22
1924	Foster, Jas.	831 60	1921	Iler, B.	1,959 96
1916	Frank, E.	638 52	1920	Isaacson, H. N.	1,559 83
1922	Fraser, A. J.	1,890 00	1922	Jackson, E. S.	794 66
*1897	Frazer, M. H. White	21 66	1901	Jackson, J. A.	340 00
1922	Frazer, Peter	1,152 00	1922	James, T. C.	1,610 00
*1910	Fréchette, Achille	1,301 44	1925	Johnson, B. E.	560 00
1916	French, J. L.	868 00	1923	Johnstone, G.	1,610 00
1922	Frigon, J. A.	2,625 00	1922	Johnstone, W. J.	2,799 96
1903	Gabriel, J. McN.	624 00	*1912	Jones, Albert	139 98
1899	Galbraith, J.	197 60	1897	Jones, Allan	1,120 00
1918	Gallet, Alphonse	717 50	1914	Jones, C. J.	2,450 00
*1912	Gariépy, J. B.	286 68	1913	Jones, James G.	473 52
1925	Garneau, A. L.	1,596 00	1920	Jones, L. K.	2,800 00
1922	Gass, W. H.	980 00	1921	Jones, R.	1,568 77
1925	Gaudry, H. D.	1,138 66	1918	Jones, W. E. C.	951 96
1909	Gauthier, Avila	204 00	1919	Just, C. F.	2,799 96
1912	Gauthier, Pierre	476 30	1922	Kavanagh, C. E.	1,991 22
1923	Gendreau, A. B.	1,176 00	1923	Keating, C. J.	2,016 00
*1919	Genest, J. A.	613 34	1922	Kemp, A. E.	1,855 00
1914	George, F. J.	623 88	*1917	Kent, S. B.	1,623 60

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.		SUPERANNUATION No. 1	$ cts.
1922	Ketchum, F. E.	1,092 00	1922	Matthewman, E. H.	1,988 00
1922	Ketchum, W. O.	1,050 00	*1919	Maxwell, S. R.	205 46
*1892	Keys, Jas.	27 84	1916	May, Ida M.	696 00
1922	Kimber, W.	875 00	1920	Maynard, M. W.	1,960 00
1917	King, Richard M.	1,190 00	1922	Mercer, R. G.	1,991 22
1912	Kinney, John	610 68	1917	Mercer, Wm. O.	1,960 00
1918	Kirkpatrick, John A.	1,260 00	1922	Merrick, K.	1,171 33
1918	Kirwan, Philip T.	1,470 00	1922	Middleton, A. T.	1,561 00
*1903	Lagacé, P.	140 00	1903	Miggins, M.	216 00
1922	Lalande, J. B. A.	1,050 00	1907	Miller, John G.	687 20
1920	Landor, A.	801 08	1907	Milne, Chas.	240 45
1922	Lane, H. B. S.	1,960 00	1922	Mitchell, Wm.	1,082 64
1921	Langstone, W. H.	1,075 55	1924	Moffat, R. B. E.	1,427 94
1922	Lantier, A. A.	2,164 57	1922	Mollard, J. T.	1,260 00
1916	Lapointe, T. H.	980 00	1920	Montizambert, Dr. Fred.	3,791 67
1923	Larivière, C.	1,780 33	1922	Moon, F. G.	2,162 20
1907	Larose, Anatole	1,020 00	1912	Moore, T. E.	360 48
1915	Larose, Joseph	792 00	1925	Moren, M. J.	1,431 50
1921	Lawless, M.	785 34	1904	Morris, Chas. E.	72 00
1924	Lawrence. J. W.	524 22	1918	Morrissey, John	582 12
*1909	Lawson, J. A.	490 00	*1922	Mulcahy, P. J.	208 70
*1907	Lebel, J. A. W.	408 00	1909	Mulhern, M. M.	810 66
1909	LeBlanc, Chas. P.	191 33	1912	Mullin, Thos.	288 34
1921	LeBlanc, J. J.	330 00	1914	Mundy, W. A.	532 10
1923	Ledoux, Jos.	1,050 00	1901	Murphy, Wm.	415 92
1903	Leduc, C.	128 04	1919	Murray, J. P.	1,120 00
1919	Lefebvre, Louis	1,119 96	1916	Myers, Robt.	654 36
1907	Legault, O.	180 00	1921	McAuley, D.	210 00
1903	Leguerrier, J. B.	112 20	1925	McCarthy, Nona	1,057 00
1921	LeMoine, Jules	1,262 76	1906	McClive, John	480 00
*1915	LeSueur, C. P.	1,750 00	1921	McConnell, R. G.	3,950 88
1922	Letteau, H.	981 56	1916	McCormick, Edgar	524 26
*1914	Levasseur, L. N. Z.	609 20	1921	McCulloch, John Oliver	1,148 64
1897	Lightfoot, F. C.	502 84	1925	McDonald, B. R.	2,156 00
1895	Lilley, J. H.	142 80	*1907	McGee, John J.	186 66
*1917	Lithgow, J. T.	2,520 00	1922	McGill, A.	2,940 00
*1914	Little, Hugh R.	43 16	1921	McGovern, J. J.	1,120 00
1908	Lloyd, Frank	371 58	*1913	McKay, C. S.	37 47
1923	Loan, J. B.	979 20	*1923	McKenzie, C. J.	152 30
1914	Low, A. P.	3,099 96	1919	McKeown, J. A.	544 62
1903	Lussier, Joseph	264 00	1921	McKinley, C. H.	140 00
1899	Lynes, K.	442 00	1922	McKinnon, M.	1,531 87
1922	Lynn, J.	821 67	1924	McLagan, John	875 00
1922	Lynton, T. C.	1,082 64	1918	McLaren, Duncan	319 32
*1895	Macdermid, A. J.	35 00	1922	McLellan, N.	1,084 08
1911	Macdonald, James	525 00	1910	McMahon, Wm.	866 25
1914	MacDonald, Jno. G.	520 45	1913	McMordie, A.	482 02
1921	Mackay, J. E. B.	1,030 55	1909	McNair, W. C.	368 29
1902	MacKillop, J.	240 00	1922	McNeil, Neil	1,549 33
1910	Mackinnon, W. C.	638 00	1925	McNeal, W. L.	1,155 67
1917	MacLaren, Jno. S.	2,100 00	1911	McNicol, John	1,470 00
1924	MacLeod, J. O.	2,100 00	1899	McRobert, W. H.	288 00
1919	Macpherson, W. T.	1,224 00	1923	McRobie, A. J.	1,260 00
1920	Magee, R. G.	980 00	1923	McRobie, J. T.	1,092 00
*1915	Mahar, John	160 14	1909	McShane, J. F.	372 00
1912	Mailman, J. A.	464 80	1907	McTaggart, John	552 00
1907	Mainguy, Philip	560 00	1917	Nesbitt, Margaret W.	700 00
1919	Malcolm, Jas.	951 96	1916	Nevins, N.	302 43
1908	Maracle, Miss F. K.	366 36	1897	Newberry, I. M.	207 61
1920	Marceau, J. O.	1,758 54	1906	Newbigging, Thomas L.	476 40
*1903	Marks, John	23 00	1909	Newbury, C. W.	550 00
1920	Marshall, J. W.	2,380 00	1923	Newbury, J. C.	2,800 00
1922	Martin, J. C.	2,166 84	1911	Newby, Frank	1,119 96
1906	Martin, Jules G.	156 00	1917	Newcomb, Geo. H.	1,560 30
1915	Mason, Frederick	1,516 66	1907	Newman, John J.	404 60
1925	Masse, A.	1,119 96	1914	Newsome, A. E.	297 30
1926	Masters, Chas. H.	2,776 66	1922	Nicholls, Wm.	1,046 11
1921	Mathieu, A.	1,033 28	1922	Noel, J. P.	841 52

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.		SUPERANNUATION No. 1	$ cts.
1912	Nolet, J. G.	636 96	1915	Russell, Wm.	1,245 75
1897	Nugent, James	156 00	1922	Rutherford, Jas.	1,899 33
1912	O'Brien, W. D.	1,464 16	1903	Sargent, Robert	167 70
1924	O'Connell, Ellen M.	1,512 00	1922	Saucier, X.	2,346 30
1904	O'Connor, Mrs. Eleanor	368 00	1918	Saulnier, John	182 00
1922	O'Connor, Jas.	1,256 64	1921	Saunders, C. J.	746 68
1917	O'Connor, John F.	1,650 83	1910	Scholes, Adam	422 76
1918	O'Donoghue, D.	1,497 25	*1919	Scott, Andrew	186 66
1922	O'Donoghue, M. J.	1,240 00	1903	Scott, John	504 00
1914	O'Gorman, Cornelius	357 29	1903	Seely, Neil	216 00
*1887	O'Hara, James	216 65	1923	Séguin, F. O. O.	1,936 78
1914	O'Leary, Thos. Jos.	919 92	1924	Sewell, T. C.	1,218 00
1922	Oliver, F. A.	640 00	1909	Seymour, A. J. B.	540 00
1919	O'Meara, D. D.	2,100 00	1923	Shannon, S. L.	4,200 00
1922	O'Neil, H. T.	1,050 00	1917	Shaughnessy, John	768 06
1915	O'Regan, W. H.	972 12	1888	Shaw, G. A.	403 20
1925	Orr, D. G. E.	1,113 00	1922	Shaw, H. S.	1,556 60
1913	Ouellet, F. X.	499 24	1919	Shaw, Mary	736 28
1912	Owen, Charles	489 96	1913	Shaw, M. M.	388 92
1921	Panneton, C. E.	932 88	1921	Sherwood, H.	1,872 50
1920	Paradine, Thos.	594 54	1924	Simard, Jean B. M.	1,073 37
1919	Parish, G. H.	1,312 50	1921	Simard, Léon	564 47
1914	Park, Robt. H.	741 00	1922	Simons, J.	1,260 00
1909	Parker, Lewis	1,190 00	1922	Simpson, A. F.	2,358 00
1924	Parry, W. S.	1,008 00	1919	Simpson, H. E.	1,008 00
1923	Parson, B. A.	1,092 00	1899	Sims, J. C.	840 00
1922	Patrick, Mary	1,046 11	1922	Skelly, E. J.	1,084 09
1922	Payne, Edward	960 00	1921	Smith, C. E.	1,260 00
1904	Pearce, Wm.	1,380 00	1921	Smith, D. J.	1,120 00
1912	Pearson, W. O.	432 60	1908	Smith, E. L.	400 80
1917	Perkins, Francis N.	469 44	1921	Smith, Geo.	1,423 33
1922	Pierson, Chas.	1,084 09	1913	Smith, Gertrude	500 50
1910	Plamondon, O.	496 00	1897	Smith H. H.	1,590 00
1897	Plante, Gaspard	264 00	1914	Smith, John	509 60
1907	Plunkett, Joseph M.	296 33	1902	Smith, J. Rose	980 00
1921	Pollock, G. B.	1,032 50	1922	Smith, Mark	750 86
1918	Pope, Chas.	1,470 00	*1922	Smith, T. J.	1,026 67
*1923	Pope, G. D.	1,622 25	*1916	Soutter, A.	490 00
1912	Porter, E. H.	210 00	1925	Sowter, T. W. E.	1,302 00
1918	Potter, M. J.	1,540 00	1918	Sparks, Geo. A. S.	1,120 00
1913	Pottinger, David	4,900 00	1918	Sparks, Robert	1,248 33
1919	Power, F. J.	1,120 00	1919	Spence, F. H.	1,050 00
1917	Power, John R.	1,400 00	1921	Spencer, J. H.	1,120 00
1922	Pringle, Jas.	1,084 09	1924	Springate, Geo.	896 00
1924	Prud'homme, L. T.	1,680 00	1921	Sproule, J.. F.	953 42
1914	Pryor, Oswald	1,034 44	1920	Stanton, C.	2,916 60
1915	Ralph, Arthur R. F.	604 00	1921	Steacy, C.	805 92
1921	Ramsden, J. A.	1,160 64	1919	Steele, E. Y.	1,119 96
1917	Ramsey, W. J.	924 00	*1909	Stein, L. F. L.	460 86
1922	Ratchford, C. E.	1,050 00	1924	Stephenson, E. F.	3,033 29
1924	Raymond, R.	1,119 96	1925	Stevens, W. F.	1,390 92
1897	Reed, Hayter	1,024 00	1905	Stewart, Chas. R.	452 16
1912	Reeves, C.	602 52	1924	Stewart, D.	2,100 00
*1921	Renaud, J. E.	85 55	1914	Stewart, Miss H. E.	713 00
1917	Renton, John L.	909 96	1921	Stewart, W. C. E.	1,739 63
1914	Richard, Alphonse	420 00	1919	Stokes, Wm.	980 00
1921	Richardson, H. E.	752 27	1919	Storr, Ira W.	2,310 00
1906	Richardson, William	388 19	1924	St. Denis, E. H.	2,736 96
1902	Richey, W. M.	534 65	1922	St. Onge, J. A.	721 30
1902	Rivers, Robt.	259 92	1926	Strange, J. Campbell	2,730 00
1922	Robert, P.	841 52	1927	Strong, William	484 45
1923	Robinson, L.	1,099 56	1916	Sutherland, Geo. C.	224 00
1923	Roche, Geo.	1,088 00	1901	Suthern, F.	270 00
1922	Rochester, F. K.	2,171 17	1925	Swaine, G. B.	322 31
1921	Rodgers, Geo.	723 73	1922	Sweetnam, G. B.	1,512 00
*1923	Ross, Jas. W.	495 00	1911	Symes, P. B.	1,851 10
1890	Roy, Joseph	38 80	1920	Taché, J. C.	2,046 32
1895	Russell, A. J. H.	672 00	1915	Talbot, Octave Z.	1,750 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 1	$ cts.
1897	Tansey, D.	300 00
*1901	Taylor, Amos	19 00
1924	Taylor, C. J.	2,331 00
1917	Theakston, Major John	657 30
1901	Thomas, G. A.	352 00
1922	Thompson, A. G.	1,434 87
*1920	Thompson, W. H.	154 74
1922	Throop, A. W.	2,535 25
*1921	Tighe, Ed.	545 21
1921	Till, Thomas M.	1,423 31
1913	Toupin, F. X. J. A.	1,635 00
*1912	Tremaine, R. W.	132 60
1912	Turgeon, C. E.	1,120 00
1918	Turner, H. H.	1,435 00
1906	Upper, A. H.	187 08
1921	Valeur, Jos. A.	1,027 80
1911	Venning, R. N.	1,981 38
1917	Vézina, Ulrich	1,256 11
1925	Wagner, D. J.	1,920 60
1921	Wagner, M. A.	889 78
1921	Walker, E. M.	1,445 69
1897	Walker, Wm. B.	208 00
1907	Wallace, J. J.	1,750 00
1919	Walsh, Robert	980 00
1915	Ward, Joseph	648 22
*1908	Warwicker, F. S.	181 86
1915	Warwicker, W. S.	655 80
1923	Watson, C.	1,224 00
1921	Watson, Jas. W.	1,218 00
*1922	Watt, J. H.	728 00
1913	Webber, E. M.	552 00
1922	Wells, W. J.	1,016 22
1903	Wheeler, F. C.	352 00
1916	Whitcher, A. H.	1,470 00
*1921	White, G. R.	1,271 84
*1905	White, Michael	37 42
1917	White, Robt. S.	1,890 00
1922	Wigle, A.	2,196 84
1900	Williams, Jos.	300 00
1908	Williams, Thomas	1,782 00
1918	Wills, Geo. W.	1,302 00
1901	Wilson, I. H.	261 33
1909	Wilson, John	380 32
1920	Wilson, Jos.	1,016 95
1922	Wilson, W. T.	1,875 14
1918	Wood, E. B.	1,470 00
1920	Wood, John	671 44
1901	Woodland, I. H.	120 45
1917	Wright, Jos.	1,734 45
1922	Wright, R. P.	1,084 08
1912	Young, G. H.	1,749 96
	Total, Superannuation No. 1	619,230 96
	SUPERANNUATION No. 2 Civil Service Superannuation and Retirement Act, 1893, Chap. 17, R.S. 1906	
1925	Atkinson, J. H. C.	1,041 60
1918	Begin, Ludger	431 94
1916	Bernard, Henry	431 88
1922	Caron, Louis	702 44
1917	Davieau, P.	384 00
1920	Farrel, F. J.	965 03
1920	Farrow, H. W.	799 20
1921	Francis, Jno.	625 10
*1917	Frank, R.	112 68

Retired in	Name	Amount paid
	SUPERANNUATION No. 2	$ cts.
1922	Grey, C. L.	1,386 00
*1919	Harrison, G.	406 90
1912	Hoey, Wm.	327 08
1926	Humphrey, Wyndham	1,066 32
1922	Johnston, R. A. A.	2,593 44
1919	Kennedy, J.	700 00
1926	Kissick, W. J.	906 72
1924	Lambert, T. E.	2,064 60
1922	Leyden, M.	1,024 10
1919	Loftus,, S. R.	714 92
1923	MacLaughlin, T. J.	1,347 50
1924	Martin, E. S.	1,011 20
1921	Mitchell, Thos.	923 33
1921	Montanari, A. N. P.	575 47
1913	Morgan, M. H.	313 80
1923	McLeod, E. B.	1,080 00
1920	McMartin, D.	964 80
1913	O'Brien, A. H.	1,741 44
1913	Osborne, F. A.	578 66
1921	Paradis, Eugène	1,944 00
1916	Phelan, Dr. Daniel	1,512 00
1923	Porter, N.	1,028 25
1925	Reading, W. B.	1,592 00
1925	Riggs, Jas.	998 16
1925	Ring, M. J.	1,035 40
1913	Roe, Geo. H.	452 83
1922	Rogers, T.	626 40
1913	Ross, H. E.	144 00
1917	Rouillard, A.	643 90
1911	Ryan, W. L.	192 00
1914	Scott, Jno. L.	376 11
1917	Shaw, Margaret	528 00
1922	Simpson, A. M.	910 00
1924	Thompson, W. H.	882 00
1913	Wood, S. J.	328 76
1915	Young, R. St. B.	436 33
	Total, Superannuation No. 2	38,850 29
	SUPERANNUATION No. 3 (Printing Bureau)	
1920	Allan, William C.	942 86
1920	Askwith, Francis	566 16
1920	Baker, Alexander	678 00
1920	Baker, Guy C.	678 00
1920	Belleau, Laurent A.	922 65
1920	Bonnell, Amos	678 12
*1920	Cairns, Hugh H.	87 14
1920	Charrier, Méderic	471 68
1920	Connelly, Margarite	165 12
1920	Donnelly, John	677 88
1920	Ducharme, Alfred	678 00
1920	Farrer, Sarah J.	284 88
1920	Gagne, Napoleon	678 00
1920	Godin, Theophile	678 00
1920	Gorman, Thos. M.	678 12
1920	Jobin, Jean Baptiste	710 40
1920	Juneau, Pierre A.	678 00
*1920	King, Wm. G.	288 15
1920	Lecourt, Raphael	686 64
1920	Lepine, Jos.	611 28
1920	Mahoney, Johanna	284 88
1920	Maurier, Marius J.	683 64
1920	Reynolds, William H.	922 68
1920	Richard, Joseph E.	678 00
1920	Rigby, Catharine T.	290 88
1920	Savery, Sophie	290 88

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 3	$ cts.
1920	Seguin, Joseph	613 08
1920	Servant, Louis	553 92
1920	Teague, Wm. C	683 64
1920	Thoburn, Daniel	780 96
1920	Twoy, Mary	290 76
1920	Valiquette, Mary Ann	165 12
1920	Wellard, Alfred	678 00
*1920	Wilson, J. Chalmers	282 80
	Total, Superannuation No. 3	19,038 32
	SUPERANNUATION No. 4	
	Public Service Retirement Act of 1920	
1922	Abbey, A. B	471 32
1922	Abercrombie, R	145 83
1924	Ackerman, A	507 50
*1921	Adair, T. J	62 88
1920	Adams, J. A	398 91
1924	Adams, W. A	966 00
1921	Adamson, W. J	573 75
1924	Addison, Robt	845 89
1924	Aird, G. D	561 60
1921	Aitkens, Alex	436 90
1921	Alexander, F. J	1,094 79
1924	Alexander, John F	497 50
1923	Allan, H	934 02
1924	Allan, J. B	1,047 93
1923	Allen, J. W	116 23
1924	Allen, W. A	251 64
1924	Allin, W. W	360 00
1924	Almon, G. W. R	1,015 00
1924	Amey, W. J	533 17
1921	Amira, C. A	402 36
1924	Andrews, S. D	728 00
1922	Annand, T. E	794 62
1923	Antoney, C. C	632 28
1924	Appleton, Edward	975 59
1921	Archer, W. A	241 34
1924	Ard, John	216 00
1921	Armstrong, E. M	985 40
1922	Armstrong, F. J	750 00
1924	Armstrong, F. S	650 00
1924	Armstrong, John	117 26
1923	Armstrong, Nelson	108 49
1921	Atkins, B. R	651 00
1924	Atkinson, H	1,997 50
1922	Atkinson, W	216 12
1924	Aube, W	524 67
1922	Auger, A. L	1,390 00
1922	Auger, V	897 72
1924	Aylesworth, Geo. A	504 00
1924	Babin, E	750 00
1924	Babington, F.W	1,650 00
1921	Bacon, J	118 45
1921	Badeau, N	881 63
1924	Bagnell, E	219 32
1924	Baillie, C. H	480 00
1924	Bajus, W. J	840 00
1924	Baker, Wm	850 00
1924	Ballantine, A	447 92
1924	Bambrick, Edward	487 62
*1924	Bannerman, J	21 14
1922	Barbour, J. G	259 06
1921	Barfoot, S. R	1,200 00
*1923	Baril, J. A	413 97

Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.
1924	Barry, E. J	291 00
1924	Bart, Alfred	924 21
1922	Barton, A	267 00
1924	Barton, Samuel	227 52
1924	Bastien, J. A	235 74
1924	Batterton, Thos	420 00
1923	Battle, K. M	431 94
1924	Baylie, Chas	1,041 67
1924	Beardsley, G	447 96
1922	Beauchesne, J. A	432 76
1924	Beaudet, Captain J	418 25
*1923	Beauregard, F. X	147 90
1922	Beckett, E. W	393 33
*1921	Beckwith, C	1 94
1924	Bedard, Eugene	661 70
1922	Bedard, J	626 30
1924	Bedard, V	462 00
1924	Beddoe, W. A	1,075 20
1924	Beer, F. H	490 40
1924	Beers, F	226 38
1924	Begin, P. A	1,050 00
1921	Belanger, Adrien	171 20
1922	Belanger, August	405 00
1921	Belanger, G	644 58
1922	Belanger, L	533 33
1924	Belanger, Philias	660 00
1924	Bell, F. S	393 33
1924	Bell, J. J	560 00
1924	Belleau, J. A	1,290 00
1924	Belleperche, A. J. E	888 96
1924	Bennett, C	468 75
*1921	Bennett, B. C	250 73
1923	Bennett, W. A	326 32
1924	Bennett, W. V	1,469 99
1924	Bennie, J. K	805 00
*1921	Benoit, A	91 45
1924	Benson, P. H. C	1,165 50
1924	Berard, J. C	747 55
1922	Bergeron, Jos	541 48
1921	Bergeron, N	632 50
1921	Bergevin, W	265 79
1924	Bergin, Jas	819 00
1923	Berlinquet, F. X. T	1,440 00
1922	Bernasconi, G. A	1,509 44
*1924	Bernatchez, Mrs. J	3 58
1924	Bernier, Chas. C	700 00
*1924	Bernier, Jean A	58 41
1922	Bernier, Jos. Z	882 92
1921	Beroard, C. P. V	1,404 17
1920	Bigney, J. E	733 34
1924	Binks, T. C	324 56
1924	Bishop, Thos	401 87
1924	Bishop, Wm	303 30
1922	Bissonnette, L	750 15
1924	Black, John	2,400 00
1924	Black, T. McC	539 58
*1923	Blackman, C	428 22
1924	Blais, J. C. F	660 00
1923	Blake, F. L	1,155 00
1924	Blanchard, I. M	266 67
1923	Blaxland, S. W	172 00
1924	Blette, P	679 43
1922	Blois, J	709 44
1924	Boileau, J	240 80
1924	Boivin, F	282 00
1924	Boles, Thos	389 33
1921	Bolton, M. E	502 56
1924	Booth, John	109 93

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1922	Booth, Thos.	106 86	1921	Campbell, M.	456 12
1924	Bottomley, W. G.	224 00	1921	Card, Chas.	248 75
1922	Bouchard, P. A.	340 23	1922	Carey, B. T.	547 50
1922	Boudreault, F.	133 36	1921	Carey, Jno. A.	158 31
1924	Boulais, D.	197 80	1924	Carmichael, D.	350 41
1924	Boulay, M. L. C.	650 00	1924	Caron, F. X.	394 43
1922	Bourbonnais, O.	89 75	1923	Carpentier, C.	306 00
1922	Bourgault, C. E.	316 56	*1921	Carr, G. P.	106 72
1924	Bourget, A.	473 89	1923	Carr, Thos.	232 42
1924	Bourke, M.	446 66	1924	Cartier, L. A. D.	924 00
1924	Bouvier, Ulric	200 78	1924	Carty, John	400 00
1921	Bowden, G. H. M.	650 00	1923	Cashen, Jas.	387 31
*1924	Bowers, Wm.	209 52	1922	Casselman, L. J.	145 00
1924	Bowman, A.	168 00	1924	Caven, John	483 00
1921	Boyd, J. C.	918 67	*1924	Cere, T.	81 00
1922	Boyd, Jno.	390 62	1924	Chadwick, F.	1,140 00
1924	Boyer, M. A.	940 65	1922	Chagnon, J. E.	265 69
1923	Boyle, Jas.	280 85	*1923	Chamberland, H.	64 20
1923	Boyle, Robt.	259 20	1921	Chamberland, H. C.	271 85
1924	Brabazon, A. J.	1,560 00	1920	Chambers, L. H.	1,396 66
1923	Braden, E. P.	647 91	1922	Chambers, S. E.	609 50
1921	Brady, J. C.	483 00	1924	Champagne, T.	511 89
1924	Brault, L.	464 00	1922	Chaplin, T.	314 44
1921	Breen, R.	560 00	*1921	Chaput, Z.	436 80
1923	Bremner, C.	351 00	1924	Charbonneau, N.	605 94
1921	Brice, E. E.	373 33	1923	Charland, J.	406 16
1924	Brisson, J. B.	223 60	1924	Charlier, E.	1,095 49
1924	Brodie, A. W.	324 00	1924	Charlton, C. H.	531 25
1922	Brooks, H.	163 12	1924	Chartrand, Chas.	594 61
1924	Brossard, T.	368 00	1924	Chartrand, D.	231 54
1923	Brosseau, S. H.	283 32	1921	Chartrand, G.	222 00
*1922	Brown, A.	47 60	1922	Chevrier, B.	630 50
1922	Brown, Agnes L.	540 83	1922	Chinic, C. H.	590 00
1924	Brown, Alex.	1,105 00	1924	Chisholm, John J.	759 96
1924	Brown, Allan	685 50	1924	Chrystal, A. S.	234 00
1924	Brown, Denis	414 61	1924	Church, Geo. C.	372 00
1924	Brown, George B.	474 47	1923	Chute, F. B.	128 33
1921	Brown, J. C.	1,998 33	1924	Clancy, M.	660 00
1922	Brownlow, W.	1,100 00	1922	Clapin, E.	308 00
1924	Brunet, L. B. C.	636 00	*1921	Clapin, S.	711 91
1921	Bryce, P. H.	1,133 33	1922	Clarke, C. H.	795 00
1924	Buchanan, D. J.	405 00	1922	Clarke, H. G.	540 00
1922	Buchanan, G.	175 99	1924	Clarke, John D.	1,733 33
1921	Bucke, M.	530 05	1924	Clarke, M. F.	1,248 84
1924	Bunelle, Geo. L.	1,050 00	1924	Clarke, N.	375 00
1921	Burgess, T.	548 33	1923	Clarke, R. O.	447 37
1923	Burke, Hy.	360 69	1924	Cleary, M.	305 88
1924	Burnett, W. B.	628 66	1923	Clement, A.	379 52
1924	Burns, A. W.	783 00	1923	Clement, G. T.	540 00
1923	Burns, Margaret	409 50	1924	Clendinnen, C. A. E.	900 00
1923	Burns, Mary	409 50	1924	Clerke, Robt.	661 20
1923	Burns, R. J.	826 00	1922	Close, C. W.	980 00
1924	Burroughs, A.	756 00	1923	Coates, J. T.	610 00
1924	Burrows, Jos.	277 31	1924	Cochrane, Leo. W.	688 76
*1924	Burton, Thos. H.	18 60	1924	Cogswell, O. H.	811 29
1922	Bushen, Josiah	351 35	1924	Cohoon, Thos.	288 00
1924	Busselle, A. W.	840 00	1921	Colley, F.	474 89
1923	Cairns, A. E.	553 68	1924	Collins, F. A.	607 44
1921	Caldwell, J. W.	1,026 60	*1921	Comptois, T. H.	2 63
1921	Cameron, E.	168 35	1921	Connolly, W.	1,088 00
*1924	Cameron, H.	31 36	*1921	Connors, P.	281 12
1921	Cameron, Jno.	366 67	1924	Cooke, Chas. A.	1,090 00
1924	Campbell, A. E.	396 66	1921	Copp, A. O.	336 00
1924	Campbell, D. A.	340 00	1922	Corbeil, L.	885 00
1922	Campbell, David	212 63	1924	Corkery, John	1,496 66
*1924	Campbell, George	6 18	1924	Corkum, J. S.	43 37
1921	Campbell, J. M.	612 91	1921	Corner, K.	561 76
1924	Campbell, Jno.	757 50	1924	Cosgrave, Robt.	549 36

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Cosgrove, T.	529 08	1924	Devine, Patrick	594 00
1921	Cosgrove, Geo	622 22	1923	Dickson, W. H	790 27
1924	Cosky, L.	900 00	1924	Dionne, P.	461 66
1924	Cote, Alfred	936 59	*1924	Dobbs, O. G	225 00
*1923	Cote, I.	271 53	1924	Doherty, Chas. G	211 67
*1922	Coulter, D. T	793 68	1924	Doherty, I. W	539 58
1924	Courbron, E.	282 00	1924	Doig, James	467 22
1923	Cournoyer, B.	570 48	1922	Donaldson, Jno	294 12
1924	Cournoyer, Jean	84 69	1924	Donovan, W. M	779 79
1924	Courtney, D. G	1,136 67	1922	Dooley, J. J.	244 16
1921	Courville, L.	132 48	1924	Doran, Wm	108 00
1922	Coutts, J. J.	575 67	1924	Dorion, D. N.	505 17
1922	Couture, C.	1,035 00	*1924	Dorian, G. E.	63 80
*1923	Couturier, J.	57 33	1922	Dorval, G. S.	549 60
1921	Cowling, R.	549 31	1921	Douglas, R. C.	1,516 66
1924	Cox, Mrs. S. S.	806 00	1923	Doyle, E. F.	577 50
1924	Cragg, Jno	195 00	1922	Doyle, H. E.	496 92
1924	Craig, B. F.	1,092 00	1923	Drake, E. F.	2,274 96
1921	Craig, Geo	1,393 33	1924	Drapeau, J. A. P.	936 35
1921	Craig, Jas	265 80	1924	Drapeau, P.	771 66
1923	Craig, J. A.	396 00	1924	Drew, A. G. F.	493 51
1921	Craig, R. W.	552 59	1924	Drillio, Geo	565 50
1923	Craig, W. E.	410 83	1924	Driscoll, Daniel	529 67
1924	Cranston, A. J.	600 74	1924	Driscoll, James L.	539 58
1921	Crépeau, Wm	331 11	1924	Driscoll, Patrick	306 00
1924	Crilly, Wm. H.	189 00	1922	Drolet, A.	250 70
1924	Crites, D. A.	776 58	1921	Drolet, J.	220 11
1922	Croucher, Geo. A.	429 96	1924	Drolet, Pierre	277 23
*1924	Crowell, J.	376 27	1924	Dube, E.	252 00
1924	Cruickshank, Geo. A.	645 66	1922	Dube, Jos.	503 92
1921	Cummings, W.	336 89	1924	Dubois, A.	546 63
*1924	Currie, Archibald	146 87	1923	Duclos, Geo	862 98
1924	Curry, Chas	204 00	1924	Duclos, P.	954 33
1924	Custaloe, R.	416 66	1924	Dugal, A.	660 00
1924	Cyr, E.	225 87	1921	Dunbar, R. C.	1,031 28
1923	D'Aoust, A.	174 72	1921	Duncan, W.	315 00
1924	Daley, Robt	436 46	1921	Dunlop, Jno	425 26
1924	Dalglish, G. M.	625 33	1924	Dunn, J. A.	714 13
1924	Dallain, A. J.	1,140 00	1922	Duplesis, L.	430 61
1921	Dargavel, W. G.	416 67	1924	Dupuis, A.	213 54
1921	Dauphin, A.	216 67	*1924	Durantaye, G. de la	1,219 90
1924	Daveluy, J. A. P.	857 77	1924	Dyble, John H.	378 00
1921	David, T.	264 48	1924	Dye, Benjamin	198 00
1922	Davidson, T.	101 24	1922	Earl, R. W.	475 00
1924	Davis, L. C.	266 66	1924	Eddie, Chas	722 50
1924	Davy, Edward	828 00	1921	Eddy, J. A.	778 19
1924	Davy, E. S. F.	453 33	1922	Edgar, J.	700 00
1924	Dawson, J. P.	1,380 00	1924	Edgar, W. W.	900 00
1924	Dawson, Dr. W. B.	2,100 00	1924	Edwards, J. F.	622 50
1924	Deasy, Thos	1,106 66	1922	Eldridge, C. C.	900 00
1924	Deavy, Thos.	659 47	1924	Elliott, Chas	910 58
1923	Dechêne, A. M.	906 84	1921	Elliott, C. H.	750 00
*1924	Delahay, Wm	671 66	1921	Elliott, Eliza	263 48
1924	Delaney, John	750 00	1924	Elliott, G. W.	950 00
1923	Delfosse, A. P. V.	281 66	1924	Elliott, Thos	478 16
1922	Deneault, Wm	98 10	*1924	Ellis, Chas. S.	145 61
1921	Denechaud, C.	502 59	1921	Ellis, J. H.	732 50
*1924	Depencier, L.	32 50	1924	Ellis, Wm. T.	536 00
1924	Dery, Joseph	727 46	1921	Elsterman, F. W. B.	311 64
1924	Deschesnes, M.	203 25	1924	Emery, H.	728 00
1924	Desforges, X.	236 25	1921	Emmett, C. D.	354 44
1924	Desilets, J. A.	754 17	1921	Emmett, F.	289 17
1921	Desjardins, P.	544 45	1924	England, Frederick	307 00
1922	Desmarais, O.	139 68	1923	Erratt, W. H.	295 17
1923	Desmarais, S.	472 78	1922	Ewing, R.	697 50
1923	Desrochers, Z.	609 43	1924	Eynouf, Geo	146 51
1924	Desroches, M. L. C.	393 83	1923	Fahey, J.	681 00
1922	Desrosiers, L. A.	1,754 16	*1923	Fahey, W.	204 57

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Fairen, F.	760 50	1921	Germain, M.	245 82
*1924	Fairley, Wm.	288 23	1924	Gervais, Wm.	620 28
1921	Farquaharson, D. R.	715 56	1921	Gibbons, J. A.	684 99
1923	Farrel, Julia	535 00	1924	Gibson, John	309 28
1924	Farrell, Minnie J.	832 50	1923	Giddens, F. W.	1,265 00
1924	Farrell, P.	495 00	1923	Giffen, I. L.	415 66
1924	Farrell, Wm. J.	933 35	1924	Gilchrist, James	231 23
1924	Farrow, M. Y.	795 00	1922	Gillespie, Wm.	401 78
1922	Farrer, Emma E.	229 59	1921	Gillis, Jno.	429 45
1924	Faulkner, Geo.	156 82	1924	Gingras, E. X.	1,050 00
1924	Favelle, John	376 66	1921	Girard, Chas.	250 17
1924	Ferguson, D.	832 47	1924	Giroux, W. J.	377 50
1923	Ferguson, J. N.	871 82	1924	Glover, Thos.	229 13
1924	Ferriman, W. J.	714 57	1921	Gooday, L.	401 28
1921	Finkle, H. J.	665 76	1924	Goodhue, M. L. E. B.	603 75
1921	Finlayson, A.	664 08	1924	Gordon, A. E.	176 00
*1920	Finlayson, W.	19 34	1924	Gordon, F. G.	637 50
1921	Fisher, C. A. L.	698 61	1924	Gore, W. J.	414 00
1924	Fitzgerald, E. W.	943 33	1922	Goudie, John G.	780 00
1924	Fjeldsted, T.	140 00	1924	Gould, I. A.	1,175 00
1924	Fleming, G. S.	1,176 00	*1922	Goulet, A.	56 85
1921	Fleming, Wm.	289 92	1924	Grace, P. J.	316 66
1924	Fletcher, Hugh	465 81	1924	Grece, Wm.	549 00
1921	Fletcher, R. W.	923 56	1924	Graham, A.	78 75
*1923	Flett, Chas.	71 74	1924	Graham, H. C.	1,608 75
1921	Flett, Jas.	219 47	1921	Graham, S. L. C.	497 92
1921	Flynn, M.	305 21	1922	Graham, W.	243 33
1924	Foran, J. K.	1,722 48	1921	Graham, W. R.	1,948 33
1922	Ford, Mabel	666 44	1924	Granger, I.	352 00
1924	Foreman, H.	693 50	1921	Grant, A. F.	366 67
1923	Forest, S.	754 00	1922	Grasse, P. L.	470 25
1924	Forget, A.	647 50	1924	Gray, Geo. W.	340 00
1924	Forrest, Alex.	1,625 33	1924	Green, M.	505 14
1924	Forsyth, J. R.	1,078 77	1923	Green, Thos.	285 49
1924	Fortier, A.	1,643 34	1924	Gregory, Chas.	300 00
1924	Fortin, F. X.	786 54	1924	Grenier, Jos.	454 56
1924	Fortin, P.	32 71	1924	Grenier, S.	235 89
1924	Fortune, Robt.	315 77	1920	Grey, F. W.	492 69
1924	Foster, J. H.	476 67	1922	Grice, Jno.	482 50
1924	Fotheringham, Geo.	666 66	1923	Grieve, A. D.	1,010 00
1922	Fowler, J. J.	241 57	1923	Griffith, W. L.	2,747 36
1921	Francoeur, A.	166 66	1924	Grison, A. A.	1,138 33
1924	Fraser, D.	295 56	1924	Guenet, A.	355 04
1924	Fraser, Jas. L.	128 33	1923	Guerard, A. E.	458 28
1921	Fraser, M.	601 12	1924	Guindon, A.	416 00
*1924	Fraser, S. M. L.	467 93	*1920	Haanel, E.	332 76
1923	Fredenburgh, G. C.	360 00	1924	Hackett, Annie	745 00
1922	Frenett, J. L.	147 50	1924	Hagen, S. C.	317 17
1920	Frink, J. H.	980 55	1921	Hagerty, B.	561 53
1924	Fuller, R. L.	1,271 11	1924	Hall, Geo. A.	1,034 44
1924	Fullerton, John	518 77	1924	Hall, Richard	469 94
1924	Fullerton, R.	88 89	1924	Hall, R. P.	694 24
1921	Fulthorp, G. E.	342 87	1924	Halle, F.	1,072 22
1923	Furnival, S.	270 00	1924	Halpenny, J. H.	540 00
1922	Gagne, F. X.	800 00	1921	Hamel, A.	655 83
1921	Galbraith, Wm.	481 92	1924	Hamel, M.	361 00
1924	Gamble, S.	143 00	1922	Hamilton, I.	711 31
1924	Gammon, T.	203 45	1921	Hamilton, P. J.	624 89
1924	Gaston, John	236 25	1924	Hamilton, W. B.	597 00
1924	Gaudet, P.	984 72	1924	Hamlett, O.	228 00
1921	Gaumond, Thos.	383 44	1924	Hampshire, C. C.	840 00
1922	Gauvin, Joseph C.	820 68	1924	Hand, E. J.	561 17
1924	Gauvreau, Alex.	343 17	1924	Handy, Jos.	729 73
1924	Gauvreau, J. A.	480 00	1924	Hanley, H.	293 87
1924	Gauvreau, N. B.	1,032 00	1924	Hanlon, Mary A.	541 66
1921	Genest, J. B.	611 11	1921	Hanlon, B. J.	516 90
1924	Gent, A.	368 57	1923	Hanson, P.	315 92
1921	Georgeson, J.	610 00	*1924	Harding, E. A.	319 39

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1922	Harding, Jas.	344 13	1922	Jean, E.	333 25
1924	Harris, G. M.	362 66	1922	Jeffcott, J. E.	861 42
1924	Harris, T. A.	594 00	1921	Jeffrey, C.	170 25
1923	Harvey, J. W.	1,008 00	1923	Jenks, J. N.	50 00
*1924	Haskett, Elizabeth	43 56	1924	Jenkins, Wm.	973 66
1923	Hastings, T. A.	828 00	1924	Johnson, I. S.	540 00
1921	Haws, W.	426 84	1921	Johnson, E. V.	1,500 00
1924	Hay, Jos.	440 00	1921	Johnston, C. W.	838 50
1921	Hayne, Thos.	511 20	1924	Johnston, C. H. J.	317 05
1920	Heath, Geo.	328 08	1924	Johnston, David	208 00
1923	Hebert, John	726 25	1924	Johnstone, H. W.	900 00
1924	Heeschen, C. C.	561 66	1924	Johnston, Jane McI.	300 00
1921	Heffler, E.	412 96	1923	Jones, A. E.	747 50
1921	Heise, W.	272 69	1924	Jones, C. H.	1,203 70
1923	Hembraugh, Thos.	832 00	1924	Jones, Thos.	352 00
1924	Henderson, A.	474 38	*1924	Jones, W. D.	455 95
1924	Henderson, Wm.	1,500 00	1921	Jukes, H. A.	1,134 02
1921	Henley, I. C.	420 24	1924	Kealey, H.	270 00
1924	Henshaw, G. H.	941 04	1923	Kealey, M. T.	452 57
1924	Heppelle, E.	151 58	1924	Keays, E. M.	660 00
1924	Herbold, A.	600 00	1922	Kelly, G. P.	302 50
1921	Herchmer, F. K.	1,435 00	*1924	Kelly J.	1,291 96
1922	Hicks, A. M.	704 66	1921	Kemp, E.	963 04
1922	Hickson, R. J.	907 11	1924	Kennedy, Wm.	404 72
1924	Higgins, Wm.	196 67	1924	Kenney, J. J.	189 00
1924	Higman, O.	2,179 16	1924	Kerr, J. W.	610 11
1924	Hill, J. F.	1,168 22	1924	Kilduff, P. A.	480 00
*1922	Hill, J. H.	60 40	1921	King, G. C.	2,000 00
1922	Hill, R. T.	437 50	1921	Kingsmill, E. A.	618 75
1924	Hill, T. H.	450 00	1924	Kingston, J. S.	493 32
1924	Hillier, E. G.	513 26	1921	Kinsman, R. W.	346 67
1921	Hodgson, G.	705 00	1924	Kirk, J. T.	555 83
1924	Hoey, Jas.	506 66	1924	Kirkwood, J. S.	1,107 50
1921	Hollins, J. M.	712 91	1924	Knox, Jos.	394 29
*1924	Holmden, H. R.	737 91	1924	Kuhlman, J.	613 33
*1923	Homer, F. W.	100 00	1924	Kurs, Jos.	637 50
1924	Hope, Geo. F.	500 00	1924	Kylie, Richard	452 00
1924	Horner, F. B.	448 00	1924	Labelle, F.	180 00
1922	Houde, G.	643 50	1924	Labelle, Jos. E.	288 00
1924	Houle, Jos.	284 00	1924	Labine, G.	1,366 66
1924	Houston, Geo.	239 05	1921	Labonté, L.	338 42
1924	Howard, E.	320 05	1921	Lacombe, A.	432 50
1921	Howard, T. A.	390 00	1924	Lacombe, L.	222 55
1924	Howe, Thos.	1,140 00	1924	Lacouture, L.	711 75
1924	Howell, Thos.	852 00	1924	Lacroix, E. O. H.	767 50
1924	Howson, Geo. H.	565 99	*1923	Lacroix, O.	94 65
1921	Hubbell, A.	404 16	1924	Lacroix, S. C.	722 66
1924	Hubley, C. F.	776 00	1924	Laflamme, V.	639 60
1924	Hudson, Chas.	872 06	1924	Laforest, J.	786 61
1924	Hughes, J. W.	425 00	1924	Lafortune, D.	589 73
1924	Hughes, Wm.	474 30	1924	Lafrance, I.	394 25
1922	Humphries, T.	1,380 00	1924	Lagace, O.	169 27
1922	Hunt, B. J.	914 33	1923	Lahaye, O.	614 32
1923	Hunt, Robert	305 25	1924	Lake, Wm.	582 72
1923	Hunter, Jas.	821 95	1924	Lally, F.	953 33
1923	Hunter, S.	535 53	1920	Lalonde, E.	162 78
1924	Hurst, John	486 00	1921	Lalonde, L. N.	512 89
1921	Hutchins, R. F.	459 78	1921	Lamarre, A.	248 62
1921	Hutchinson, H. H.	666 67	1924	Lamoureux, A.	428 48
1921	Hutton, H. W.	319 44	1924	Lamoureux, F.	140 91
1921	Hynds, R. W.	465 32	1921	Langelier, F.	487 56
*1924	Imlah, J.	597 70	1924	Langevin, P.	670 87
1921	Ireland, C.	195 36	1924	Lanteigne, G.	340 00
1924	Jackson, F. N.	726 00	1924	Lapierre, L.	94 50
1921	Jackson, S. J.	452 00	1924	Laplante, J. B.	252 64
1922	Jackson, W.	147 18	1924	Laprise, Jos.	609 88
1924	James, R. F.	481 60	1924	Larivee, H.	767 50
1924	Jamieson, Wm. A.	735 48	1924	Lariviere, N.	453 24

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1921	Laroque, J.	364 77	*1923	Mahood, Jas.	201 08
1923	Larose, G.	242 92	1924	Mailleue, H. W. G.	647 50
1924	Larose, W.	1,369 44	*1921	Mair, Chas.	164 87
1923	Latendresse, M. A.	928 78	1924	Mair, Chas.	872 00
*1924	Lavallee, Chas.	28 24	1924	Major, A.	345 33
1924	Lavallee, J. B.	839 40	*1924	Malcolmson, John	317 58
1924	Lavictoire, E.	448 75	1924	Mallette, N.	125 14
1921	Learmouth, A.	541 66	1923	Mallette, Nap.	407 55
1924	Lebano, M.	46 45	1924	Malouin, A.	675 00
1924	Lebel, Chas. A.	840 00	1924	Maloney, H. G.	400 91
1923	LeBlanc, B.	430 00	1924	Mann, G. G.	516 60
1921	Leblanc, J.	420 41	1922	Manson, D. A.	200 00
1920	LeBlanc, R.	553 33	1921	Marchant, W.	1,273 15
1924	Leblanc, S.	471 25	*1921	Marion, H. R.	432 20
1924	Leclair, P.	637 50	1923	Martial, H.	455 00
1924	Lederman, Agnes	526 75	1922	Martin, A.	864 67
1924	Lee, S.	258 64	1924	Martin, F. W.	924 00
1923	Lefebvre, A.	100 27	1922	Martin, I. E.	2,601 34
1924	Legendre, Mrs. L.	262 17	1922	Martin, T. G.	270 00
1924	Lemieux, J. A.	615 12	1922	Martin, W.	104 46
1924	Lemieux, J. N.	798 00	1924	Martineau, A. L. C.	563 33
1923	Lemieux, Z.	595 44	1922	Martineau, M. J.	725 00
1924	Lemire, J. N.	292 00	1924	Mathe, N. M.	1,050 00
1924	Lenghen, C. G.	319 71	1921	Mathieu, P.	385 00
1924	Leonard, J.	688 51	1923	Matthews, A. M.	238 33
1923	Lepage, C.	748 86	1924	Matthews, C. A.	935 00
1922	Lewis, A.	250 00	1924	Matthews, P. H.	317 77
1924	Lewis, Lydia J.	738 75	1924	Mayes, John	212 33
1923	Lewis, M.	365 00	*1922	Maynard, John	69 01
1924	Liberge, F.	379 60	1924	Meadows, Geo. A.	503 64
1921	Limoges, A.	644 22	1924	Meggs, A. E.	224 25
1922	Lindeburgh, A. V.	654 50	*1922	Menzies, W.	1,319 75
1924	Linloff, E.	162 00	1921	Mercer, E. N. H.	646 33
1921	Little, C.	725 92	1924	Mercier, J. B.	1,099 11
1924	Logan, D.	686 40	*1921	Merrick, H.	542 76
1922	Long, W. H. A.	753 25	1923	Merrithew, J. N.	126 02
1924	Longley, T. W.	288 75	1923	Merry, E.	518 85
1921	Loring, R. E.	1,098 33	*1921	Merson, Wm.	558 05
1921	Lortie, V.	456 94	1924	Messenger, H. W.	575 00
1924	Low, E. J.	1,004 11	1922	Might, S. H.	702 00
1923	Lowery, J.	287 23	1924	Migneault, A.	528 00
1922	Loyer, E.	405 17	1924	Milette, Sara	546 00
1924	Lundy, Thos.	464 81	1924	Millner, Geo. F.	682 56
1924	Lunney, J. P.	656 94	1923	Mills, N.	1,400 00
1921	Lusher, Thos.	207 78	1924	Mills, Wm.	554 40
1921	Luttrell, Jos.	249 41	1924	Milne, G. L.	800 00
1924	Lyman, C. C.	525 00	1924	Milne, W. J.	1,181 67
1924	Macarow, M. E.	448 00	1924	Milner, W. C.	1,120 00
1921	MacDonald, G. M.	597 59	1923	Mitchell, G. H.	1,587 48
1921	MacDonald, J. B.	283 33	1924	Mitchell, G. L.	273 00
1924	MacDonald, Jessie C.	515 58	1924	Mitchell, J. A.	787 50
1924	Macdonald, L. S.	496 66	1923	Mitchell, J. T.	540 00
1921	MacDonald, W.	560 64	1921	Mitchell, J. W.	544 44
1924	Macdonell, J. H.	253 45	1924	Mitchell, Robt.	874 00
1924	MacKay, Robt.	756 00	1922	Mitchell, Wm.	205 16
1922	MacKenzie, A. B.	574 00	1921	Moberly, Frank	910 00
1924	Mackenzie, Jno.	500 00	1921	Moblo, Jno.	825 00
1924	MacKey, W. H.	389 17	1924	Moeser, Wm.	616 00
1924	Mackie, Robt.	420 00	*1924	Moffet, P. E.	509 85
1922	MacKintosh, C. H.	416 66	1924	Moloney, A.	169 20
1921	MacLennan, F.	1,094 38	1924	Monahan, P.	623 79
1924	MacMillan, A. T.	397 13	1924	Monette, Adrien	627 09
1921	MacMillan, J. H.	640 68	1924	Mongrain, E.	165 09
1922	MacPherson, Duncan	1,319 16	1924	Montgomery, A.	195 00
1921	MacRae, D. M.	317 49	1922	Mooney, M.	405 17
1924	Magee, D.	126 29	1924	Moore, Robt.	208 00
1923	Magee, W. D.	741 00	1921	Morel, E. L.	329 16
1921	Maher, Jno.	178 03	1924	Moriarty, B.	195 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1922	Morris, A. S.	904 22	1924	McLeod, J.	663 00
1924	Morris, T. J.	435 75	1924	McLeod, J. C.	808 33
1921	Morrish, T. H.	217 47	1922	McLeod, W. McK.	640 00
1924	Morrison, A.	537 48	1924	McNab, A. J.	522 00
1924	Morrison, A. J.	117 30	*1924	McNeill, D. H.	281 43
1924	Morrison, Peter	340 00	1924	McNeil, J.	241 62
1924	Morrison, W. J.	334 00	1923	McPhee, Jas.	198 33
1923	Morton, Thos.	780 00	1924	McPherson, J.	1,050 63
1921	Mothersill, G. A.	1,762 50	1924	McRae, A.	420 00
1924	Mowat, W. J.	647 11	1920	McRae, C. F.	316 80
1922	Muhlig, G. E.	662 50	1924	McRoberts, R. C.	728 00
1924	Mulligan, A.	764 59	1924	McShane, J.	110 48
1924	Mullin, J.	274 40	1923	McTiernan, C.	259 27
1924	Mulroney, J. T.	568 36	*1922	Naubert, Bella	226 14
1924	Mumford, L. S.	265 83	1921	Nesbit, Geo.	200 60
1924	Munn, A.	1,668 33	1924	Nesbitt, G. McQ.	317 76
1924	Munroe, J. J.	374 30	1921	Nettle, F. J.	437 50
1924	Murdock, P. C.	518 77	1922	Neville, James	370 49
1924	Murphy, C.	517 71	1921	Nevins, F.	530 44
1924	Murphy, J. A.	498 43	1924	Nevins, J.	780 41
1924	Murphy, M. A.	473 34	1924	Nevins, Jos.	450 00
1924	Murphy, W.	280 58	1923	Newcombe, H.	991 66
*1924	Murray, D. J.	455 62	1921	Newling, H. P.	671 53
1924	Murray, J. B.	230 00	*1924	Newman, J. A.	130 00
1921	Murray, W. H.	494 50	1924	Nezan, L.	360 26
1921	Murton, F. E.	473 82	1924	Nichol, S.	161 33
1924	McCaffery, T. L.	650 00	1924	Nicholson, T.	491 00
1924	McCaffrey, John	546 00	1924	Nicol, J.	508 08
1921	McCleister, Wm.	217 03	1924	Nisbet, W.	388 50
1922	McCliggott, Jas.	196 83	1924	Noonan, H. T.	672 00
1924	McClintock, Jos.	209 16	1922	Noonan, M. W.	898 35
1921	McClory, D.	619 04	1921	Northwood, K.	455 80
1921	McColl, A. C.	550 00	1923	Normand, N. M.	225 50
1924	McColl, W.	203 91	1924	O'Brien, C. F. G.	560 00
1922	McCombs, W. A.	262 73	1923	O'Brien, D.	954 50
1924	McCoy, W. J.	763 00	1924	O'Brien, J.	384 31
1924	McCullough, J. H.	208 00	1922	O'Brien, J. C.	549 67
1924	McCully, G. A.	609 00	1924	O'Brien, M.	780 00
1924	McDonald, Flora J.	287 22	1923	O'Brien, W.	501 71
1924	McDonald, Jas.	382 40	1921	O'Connor, G.	549 97
1924	McDonald, M.	525 00	1922	O'Connor, K. M.	815 16
1924	McDonald, Rev. M.	572 88	1923	O'Flaherty, M. J.	660 66
1921	McDonnell, T.	307 22	1923	Ogburn, R. J.	396 00
1924	McDougall, A.	273 00	1924	Ogilvie, J.	939 00
1922	McDougall, Angus	154 17	1924	O'Hanly, M.	1,140 00
1924	McEachern, G. B.	977 66	1920	O'Leary, D.	1,425 00
1924	McEwan, J.	758 43	1921	Oliver, E. C.	709 92
1922	McEwan, P. H.	730 00	1924	O'Meara, M. T.	233 33
1923	McEwan, R. H.	232 92	1924	O'Reilly, E.	400 88
1922	McGill, W.	560 75	1923	O'Reilly, M.	285 78
1922	McGonnell, Peter	894 36	1924	Orr, S.	165 75
1924	McGovern, J.	780 24	1924	Osborne, J. L.	321 98
1921	McGuire, T.	615 25	1924	Osborne, N. P.	342 55
1923	McHugh, A.	82 50	1921	Owen, N. C.	682 37
1923	McIvor, Isabella	287 74	*1924	Page, H.	1,018 61
1920	McKay, J.	811 11	1921	Page, W.	269 50
1923	McKay, Jno.	506 40	1921	Palmer, S. A.	331 67
1921	McKay, Robt.	785 77	1924	Papillon, U.	256 00
1921	McKean, M.	728 19	1923	Papineau, G. B.	635 00
1924	McKenna, S.	266 66	1923	Papineau, L. G.	1,710 00
1924	McKenzie, A.	504 00	1924	Paquet, J. B.	272 00
1921	McKenzie, Jno.	406 92	1921	Paquet, F. X.	1,409 16
1921	McKenzie, R. S.	1,130 00	1924	Paradis, E.	420 00
1924	McLachlan, G. A.	1,312 74	1924	Paradis, P.	375 27
1921	McLean, Donald	860 56	1924	Paris, Z.	674 58
1924	McLean, W. J.	450 00	1922	Parker, Thos.	652 59
1924	McLenhan, A.	565 00	1921	Parkin, T. M.	417 84
1921	McLennan, J. G.	495 00	1922	Parrington, Jas.	882 92

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Pasmore, C. J.	483 00	*1924	Regan, D.	131 77
1924	Patchell, W. A.	1,732 50	1924	Regimbal, A.	1,403 33
1924	Patching, R.	960 00	1924	Remillard, L.	432 00
1924	Patenaude, J.	308 00	1922	Richard, J. S.	924 87
*1924	Paterson, J.	13 93	1924	Richardson, A. K.	616 00
1924	Patterson, C. C.	1,064 00	1921	Richer, A. M.	395 59
1921	Pattie, R. P.	297 89	1924	Rickey, J. A.	561 94
1924	Pawling, J.	556 11	1922	Riendieu, Arsene	936 00
1922	Payne, F. F.	1,369 44	1924	Riendieu, Avila	841 92
1921	Payne, J. L.	1,993 75	1921	Riley, T. J.	622 31
1924	Pearce, E. J.	1,145 00	1924	Ringrose, J.	117 28
1924	Pelletier, J. B.	378 88	1924	Rivers, C. A.	463 65
1924	Pelletier, R.	773 04	1924	Rivoire, J. D.	181 14
1924	Peloquin, J.	425 53	1922	Roberts, J. W. G.	862 50
1924	Pennington, W.	989 07	1921	Roberts, T.	900 00
1924	Percival, T. M.	600 00	1922	Robertson, H. H.	510 00
1924	Perkins, S. C.	741 08	1922	Robertson, J. J. B.	882 92
1922	Perreault, E. E.	774 00	*1922	Robertson, J. R.	9 09
1922	Perry, F. C.	1,068 96	1924	Robertson, R. J.	881 67
1921	Peters, J. N.	373 56	1924	Robertson, W. A.	1,112 50
1924	Peters, W. H.	463 28	1924	Robertson, W. B.	924 47
1922	Phibbs, C. J.	210 00	1921	Robertson, W. R.	715 16
1921	Phillips, J. I.	280 27	1923	Robitaille, S.	650 00
1923	Phillips, T. H.	175 96	1924	Roche, C. P.	866 25
1924	Phœnix, A. J.	527 77	1924	Rochette, P.	444 00
1924	Picard, N.	216 00	1924	Rodman, E. A.	585 00
1924	Pickins, J. M.	87 02	1922	Roe, Lottie	405 17
1921	Pigeon, H. H.	560 00	1921	Rogers, C. G.	1,026 00
*1921	Pinard, H.	133 36	1921	Rogers, F.	273 13
1924	Pinkerton, Robt.	236 25	1924	Rombough, J. I.	875 00
1924	Plouffe, A.	196 58	1923	Rose, D. J.	328 89
1924	Plouffe, N.	214 45	1924	Ross, A. H.	314 17
1924	Poirier, M. O.	1,125 00	1924	Ross, C.	826 66
1924	Poirier, T.	145 98	1923	Ross, W.	116 55
1924	Polley, W. H.	371 58	1924	Routh, E.	266 66
1922	Pollock, R.	522 96	1921	Routhier, A. M.	1,073 34
1924	Pope, E.	1,350 00	1922	Rowe, W.	436 37
1924	Porteous, G. H.	496 31	*1924	Rowen, M. B.	836 60
1922	Potter, Hy.	466 66	1924	Roy, A. J.	899 67
1921	Potter, W.	579 88	1924	Roy, J. A.	729 83
1922	Poulin, J.	657 66	*1924	Roy, L.	272 32
1924	Pouliot, J. P.	748 33	1923	Roy, M. F.	580 73
1924	Preston, S. R.	333 33	1924	Roy, M. L.	498 33
1924	Prevost, J.	443 86	1924	Ruest, E.	125 61
1920	Prevost, J. E. W.	629 54	1924	Runions, A.	405 53
1924	Prince, E. E.	2,000 00	1921	Russell, G. J. T.	333 33
1921	Probert, C. H.	294 60	1924	Russell, J. W.	300 00
1924	Proulx, J.	161 15	1924	Russell, Robert	636 00
1924	Proulx, N.	448 00	1924	Ryan, J.	842 11
1921	Pruneau, A.	263 50	1922	Rykart, J. C.	600 00
1921	Pye, J. R.	600 00	1924	Sales, Wm.	400 00
1924	Quesnel, A.	643 33	1923	Salkus, Albert	425 33
*1924	Quinn, Martin	193 33	1924	Salton, W. H.	498 75
*1924	Quinn, Michael	75 10	*1921	Sampson, T.	160 20
1924	Quinn, W. A.	307 00	1921	Sanagan, F. L.	269 72
1923	Ralph, W. B.	176 00	1922	Saunders, C. E.	1,128 88
1924	Ralston, B. W.	882 00	1924	Sauvageau, S.	782 10
1924	Raper, E. W.	928 68	1923	Sauve, Jos.	239 77
1924	Rathbone, C. F. A.	247 00	1924	Savard, H.	226 84
1924	Ray, G. H.	172 22	1924	Savard, J. B.	482 12
1924	Ray, J. E.	1,989 72	1921	Savard, J. J.	361 44
1924	Raymond, M. L.	360 00	1924	Schuler, W. B.	630 48
*1924	Raymond, S. D.	202 59	1924	Scott, J.	202 97
1921	Raymond, W. G.	1,075 15	1924	Scott, M. M.	630 00
1924	Rayson, T.	116 52	1924	Sedgwick, J.	410 83
1924	Read, G.	941 66	*1921	Seeber, E.	145 85
1924	Redhead, J. W.	235 00	1921	Seguin, D.	609 00
1921	Redmond, A.	98 76	1924	Seguin, V.	253 56

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.		SUPERANNUATION No. 4	$ cts.
1924	Selby, W. D.	900 00	1924	Sutton, L. L.	650 00
1924	Selwyn, P. H.	1,312 50	1921	Swindell, R.	257 84
1924	Semple, M. L.	682 50	1921	Sword, Jas.	204 24
1923	Shanahan, C.	459 19	1921	Taggart, Jas.	540 55
1921	Sharp, A.	885 33	1921	Talbot, Jno.	433 16
1924	Sharpe, J.	680 00	1924	Tamblyn, J. F.	966 00
1921	Shea, C.	361 04	1924	Taunton, W. D.	400 83
1924	Shehyn, A. R.	952 00	1924	Taylor, G. J.	616 00
1923	Shera, W. G.	270 00	1924	Taylor, J. G.	739 56
1924	Sherk, D.	476 05	1924	Taylor, Jno.	624 31
1924	Shultis, G. T.	104 42	1924	Taylor, J. R.	693 82
1921	Sidney, A. P.	212 60	1921	Taylor, N. H.	569 88
1924	Simard, S.	418 69	1924	Taylor, T. G.	1,282 16
1924	Simpson, F.	416 00	*1924	Taylor, W. W.	16 55
1922	Simpson, H. V.	370 00	1921	Telford, D. M.	889 76
1921	Simpson, J. S.	622 29	1921	Templeton, A.	440 46
1924	Simpson, P. E.	262 50	1922	Tétrault, F. X.	374 00
1924	Sinclair, J. W.	467 50	1921	Tetu, A.	702 59
1924	Sixsmith, B. F.	890 94	1924	Thibault, Jos.	336 00
1921	Slater, M. A.	647 91	1921	Thibert, N.	349 17
1924	Sloan, J. B.	227 50	1924	Thom, H.	528 50
1924	Sloan, W.	633 33	1923	Thomas, F. R.	934 55
1921	Smith, A. H.	757 41	*1924	Thomas, Geo.	195 80
1922	Smith, B. R.	75 00	1921	Thompson, John.	88 60
1924	Smith, J.	1,500 00	1922	Thompson, J. T.	270 44
1922	Smith, Jno.	861 77	1924	Thompson, W. G.	720 00
1923	Smith, Jno. F.	401 50	1924	Thomson, A.	407 31
1924	Smith, Jos.	167 88	1921	Thrush, Jno.	412 92
1922	Smith, J. C.	678 00	1924	Tison, R. A.	775 55
1924	Smith, J. Obed.	2,658 26	1924	Toale, J.	561 47
1921	Smith, W.	1,054 99	1924	Todd, R.	521 33
1922	Smith, Wm.	197 51	1921	Tolson, F. G.	507 50
1921	Smithers, R. O.	461 24	1924	Topham, F.	549 38
1922	Snetsinger, J. S.	422 47	1921	Towill, J.	231 09
1922	Snetsinger, R.	660 21	1924	Tramner, E. G.	759 72
1921	Somers, Hy.	175 00	1924	Tranter, K.	450 00
1924	Songhurst, J. R.	317 05	1924	Travis, C. A.	651 30
1924	Southcott, S. J.	629 77	1924	Tremblay, F.	197 16
1924	Stafford, J. P.	900 00	1921	Tremblay, J. A.	1,146 51
*1921	Stagg, J. W.	478 84	1924	Tremblay, O.	540 95
1924	Stalker, M.	606 00	1922	Tremblay, P.	453 15
1921	Stanley, E.	795 89	1922	Trépanier, L. A.	908 56
1923	Stata, C. S.	39 92	1921	Trevor, A.	173 55
1921	Steadworthy, Wm.	1,076 25	1924	Trodden, James.	1,292 94
1920	Stephens, J. P.	731 79	1924	Trudeau, A.	530 11
1921	Stevens, A.	643 75	1924	Trudel, E.	1,183 33
1921	Stewart, E.	308 00	1921	Turner, Geo.	500 00
*1921	Stewart, F.	61 23	1924	Tuura, A.	307 77
1922	Ste. Marie, Jos.	882 92	1923	Upper, J.	383 52
1924	St. Marseille, A.	110 66	1924	Valiquet, U.	2,214 96
1923	St. Maurice, A.	99 05	1922	Valpy, J. T.	199 30
*1924	Stewart, T.	401 82	1924	Vanasse, A. P.	348 00
1924	Stewart, J. B.	1,015 00	1924	Vanasse, F.	1,219 44
1924	Stewart, L. J. G.	665 16	1924	Vaughan, T.	283 23
1924	Stingue, J.	495 74	1924	Vermette, T.	390 00
1921	Stockdale, R. F.	269 17	1924	Vert, A. E.	500 00
1924	Stroulger, G. F.	933 36	1924	Vicars, J. R.	1,020 60
1924	Stuart, S. G.	391 00	1924	Vigneault, P. E.	750 00
1921	Suffern, A.	384 00	1924	Vincent, G. E.	450 00
1924	Sullivan, D.	473 85	1924	Voligny, L. R.	1,740 00
1923	Sullivan, J.	534 95	1924	Vrooman, N. B.	1,140 00
*1924	Sullivan, Wm.	210 03	1922	Wagner, L.	101 64
1924	Sullivan, W. H.	3,150 00	1924	Waine, F. E.	543 28
1921	Summers, A.	653 89	1924	Wainwright, P. H.	613 33
1924	Sumner, F. E.	514 50	1923	Wainwright, R.	752 89
1924	Surtees, W. S.	1,050 00	*1924	Walker, E.	195 20
1922	Suter, J.	145 83	1924	Walker, G.	699 22
1921	Sutherland, J. A.	450 00	1924	Walker, H. L.	598 44

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 4	$ cts.
1922	Walker, J.	432 25
1924	Walker, J. A.	256 74
1921	Walker, W. H.	480 00
1924	Wallace, J. M.	541 33
1922	Wallace, T. F.	247 92
1924	Walsh, E.	346 09
1922	Walsh, Thos.	416 99
1922	Walsh, W.	750 00
1922	Walters, H.	841 62
1924	Ward, A. E.	705 44
1922	Warren, G. S.	530 76
1922	Waterbury, D. H.	1,303 33
1924	Waters, J.	160 17
1924	Watson, Geo. A.	262 68
*1924	Watson, Wm.	14 66
1924	Watterworth, E.	252 00
1924	Weasner, J.	235 34
1922	Weaver, Jas. A.	129 03
1923	Webber, B. C.	1,883 33
1922	Webster, C. E.	374 50
1922	Webster, Geo.	207 22
1924	Weese, J. W.	219 23
1924	Werry, F. W. C.	693 27
1922	West, H.	422 76
1924	West, T.	821 80
1922	Weston, W. H.	429 00
1924	Wetmore, G. K.	396 00
1922	Whalen, W. H.	417 10
1922	Whare, A.	275 28
1922	Wheatley, G. H.	1,125 00
*1922	Wheatley, R.	20 16
1924	Wheeler, A. O.	733 43
1923	White, D.	187 00
1922	White, E. P. M.	716 04
1922	White, G. A.	879 30
1923	White, J. B.	540 00
1924	White, W. J.	2,250 00
*1924	Whitehead, J. P.	599 96
1923	Whitty, M. J.	535 00
1923	Williams, H. A. C.	351 11
1922	Williams, J. T. C.	988 00
1924	Williams, W.	236 00
*1923	Willson, J. D.	17 44
1924	Wilson, A. H.	392 00
1924	Wilson, G.	275 17
1924	Wilson, H. A.	664 58
1924	Wilson, J. A.	737 50
1924	Wilson, J. L.	198 22
1924	Winchester, L.	605 04
1924	Withrow, J. F. D.	1,008 00
1922	Wolfenden, Wm.	762 48
1924	Woodill, J. S.	845 50
1922	Wright, E.	481 51
1924	Wright, J. P.	637 00
1924	Wright, L. K.	541 66
1921	Wurtele, S. T.	455 00
*1923	Wynne, John.	108 86
1923	Yeomans, E. H.	874 00
1921	Yeomans, L. B.	477 05
1923	Young, B. R.	87 30
1921	Young, U.	501 66
1924	Young, P. P.	568 75
1924	Zinkan, G. V.	1,244 44
		723,825 34

Retired in	Name	Amount paid
	SUPERANNUATION No. 5 Civil Service Superannuation Act, 1924, Chap. 24, R.S. 1927 *Annuities to Contributors*	$ cts.
1925	Adam, J. W.	155 74
1925	Alkins, W.	204 00
1926	Allen, F. G.	1,327 56
1925	Allen, G. H.	1,470 00
1925	Alton, S. E.	186 23
*1925	Anderson, B.	101 79
1926	Andrews, G. P.	1,176 00
1926	Arcand, A. A.	693 96
1926	Back, M.	476 64
1926	Baillarge, E. S.	576 80
1926	Bauville, J.	559 20
1926	Barbe, W.	1,596 00
1924	Beaulieu, R.	1,235 52
1926	Beland, T.	792 00
1926	Belding, H. W.	1,119 96
1925	Belec, J.	349 68
1927	Belleau, A. E.	2,310 00
1925	Boak, W. C.	1,131 24
1926	Boivin, D.	890 40
1926	Bolduc, L. N.	936 60
1924	Bourque, E.	512 67
1926	Bray, J. L.	408 36
1926	Breton, N.	303 39
1926	Brochu, J. W. L.	701 64
1926	Brough, W. C.	1,823 28
1925	Brown, E. M.	392 93
1926	Brown, J. H.	615 24
1925	Brown, T. L.	521 16
1926	Bruce, D. A.	3,118 44
1925	Burns, W. P.	1,082 64
1925	Cameron, W. M.	1,092 24
1926	Campbell, A. C.	2,863 92
1925	Cauniff, W. H.	1,575 00
1925	Chambers, C.	511 56
1926	Chartrand, J. A.	453 96
1926	Cheney, W. H.	976 44
1927	Church, I. D.	254 02
1926	Cliff, W. W.	448 92
1926	Cloakey, C. H.	518 01
1925	Connolly, E.	1,470 00
1926	Coombs, J. S.	504 60
1927	Cory, T.	1,027 92
1926	Craig, S.	637 20
1926	Cuming, E. E.	367 07
1926	D'Aoust, I.	211 32
1926	Davis, J. H.	711 72
1927	Davy, R. A.	954 72
1926	Devlin, C. A.	1,091 16
1926	DeYoung, G. H.	965 52
*1925	Dionne, J. L. A.	288 60
1925	Dixon, C.	493 08
1925	Dixon, J. G.	593 96
1925	Doherty, T. K.	2,319 96
1925	Dorion, G.	582 72
1926	Doucet, R.	928 20
*1925	Drysdale, Wm.	224 43
*1926	Dubuc, J. P. E.	218 57
1926	Duncan, T.	2,520 00
1925	Dunlevie, S. A.	1,600 56
1926	Dussault, J. B.	1,081 44
1926	Dwyer, M. J.	592 32
*1925	Eagleson, J. S.	1,848 00
1925	Elliott, R. J.	948 48
1925	Everett, E. G.	1,253 64
1924	Fagan, M. H.	1,257 60
1925	Fair, J. J.	1,386 00

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid	Retired in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.		SUPERANNUATION No. 5	$ cts.
	Annuities to Contributors			*Annuities to Contributors*	
1926	Fielding, C. W. W.	1,333 44	1926	Montgomery, J. D.	324 00
1926	Filgiano, H. E. J.	1,134 00	1926	Montreuil, A. T.	2,003 43
*1925	Fitzgerald, R. M.	434 00	1926	Mouck, A. E.	381 24
1925	Fitzgibbon, J. D.	2,142 00	1927	Murray, J. P.	618 72
1926	Foley, P.	1,088 16	1925	McAllan, W. J.	524 52
1926	Fowler, E. M.	431 72	1926	McCarey, Jos.	1,932 00
1924	Fraser, B. H.	3,780 00	1926	McCullough, W. S.	233 52
1925	Gaskin, Thos.	1,441 44	1925	McDonald, M.	1,596 00
1926	Gauthier, A.	1,308 96	1927	McGillivray, H.	1,470 00
1927	Geldart, O. A.	1,627 44	1926	McGrath, M. J. T.	367 44
*1926	Gillespie, D.	294 05	1925	McGreevy, T. D.	282 08
1925	Gillmore, M. M.	491 64	1925	McInerney, L.	1,071 00
1926	Girard, P.	707 04	1926	McKendrick, D.	2,071 92
1926	Giroux, F. X.	983 40	1926	McKenzie, H. D. L.	263 20
1925	Giroux, T. A.	1,260 00	1927	McLaughlin, H.	2,866 50
1926	Goetz, G.	466 56	1925	McMinn, J. D.	218 88
1926	Gordon, A. H.	911 17	1925	McNeely, J.	1,428 00
1926	Gordon, T. A.	196 56	1925	McPherson, H. B.	482 28
1925	Greenfield, R.	1,959 96	1926	Nash, A. F.	1,197 36
1925	Grenier, A.	1,304 28	1926	Neads, M. E.	544 57
1926	Grove, J.	588 59	1927	Neelin, F. G.	1,024 92
1925	Guay, L. M.	502 20	1925	Niven, T. D.	482 79
1926	Guillemette, J. E.	1,308 96	1926	Norman, H. F.	494 78
1925	Guppy, H. J.	1,470 00	1927	Northrup, W. T.	222 48
1925	Hagan, J. B.	1,560 00	1925	O'Brien, James	1,147 92
1925	Hall, N. E.	1,132 80	1927	O'Flaherty, E.	769 32
1925	Hancock, W.	927 48	1925	Ostiguy, L. R.	910 32
1925	Hannan, J. W.	242 64	1926	Parmelee, J. D.	2,520 00
1925	Harding, S.	916 44	*1925	Paterson, A. C.	630 00
1925	Harney, W. T.	979 92	1925	Patterson, W. L.	1,042 92
1925	Hartley, H.	691 20	1926	Pattison, T. F.	1,139 16
1925	Hatch, W.	1,596 00	1925	Payne, A. N.	2,169 96
*1927	Henley, W. C.	356 90	1926	Peake, T. B.	1,459 20
1925	Henry, M.	231 00	1926	Pearson, S. M.	421 08
1926	Hetherington, H. A.	306 00	1925	Pelletier, L. M.	1,219 80
1926	Hill, A.	295 92	1925	Pelletier, P.	2,963 33
1927	Hynes, M. E.	2,016 00	1926	Poulin, C. E.	377 04
1925	Kahala, J. J.	1,379 28	1926	Preston, J. H.	569 42
1926	Kane, W. J.	1,490 46	1925	Reed, C. C.	1,287 96
1927	Keating, J. P.	1,208 64	1926	Reiffenstein, J. H.	1,959 96
1927	Keeler, R. M.	1,609 92	1926	Rennie, E. H.	1,224 96
1925	Kemeys-Tynte, A. P. M.	1,082 64	1925	Richard, L. N.	1,470 00
1926	Kidner, E.	998 16	1925	Richardson, W. H.	1,227 33
1925	Kinsman, M. B.	436 08	1925	Ring, J. W.	1,302 00
1925	Lamanque, T.	1,092 00	1926	Ritchie, J. H.	1,327 56
1926	Lamb, J.	208 08	1926	Robert, O. R.	230 13
1926	Lamb, W.	987 00	1925	Robertson, A. R.	1,115 16
1924	Landriau, F. E.	1,276 32	1926	Robinson, F. P.	588 38
*1926	Larue, J. N.	294 00	1925	Rolston, E.	934 50
1926	Laschinger, A. G.	377 88	1925	Roy, F. A.	330 60
1925	Learoyd, E. L.	1,592 50	1927	Sauriol, A.	1,596 00
1926	Lesage, L. A.	2,016 00	1927	Scott, J. C.	1,806 00
1925	Lortie, A.	1,102 44	1926	Sheppard, N. B.	2,016 00
1926	Low, J. G. M.	777 24	1925	Sinclair, C. Mc. L.	1,140 96
1927	Low, P. V.	1,120 00	1926	Sladen, A. F.	4,200 00
1925	Lynch, W. J.	2,772 00	1925	Smith, H. I.	1,318 32
1926	Macdonald, D. J.	1,119 96	1926	Smith, J.	1,061 40
1925	Macdonald, W.	601 92	1926	Smith, J. H.	102 72
1927	Macdougall, J. I.	310 56	1926	Smith, R. R.	1,103 63
1925	Mackenzie, S. M.	496 08	*1924	Smith, W. B.	31 50
1926	Magee, C. W.	882 00	1926	Sole, F.	328 68
*1925	Manhard, L. E.	508 20	1926	Sparks, S.	2,016 00
1925	Martin, A.	885 36	1926	Staniforth, C. G.	343 32
1925	Mathers, I. H.	1,188 24	1926	Stephens, A.	216 24
1925	Mathieu, J. O.	922 40	1925	Stewart, E. E.	396 60
1926	Miller, R. R.	499 56	1924	St. Germain, Mabel	573 84

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Continued*

Retired in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.
	Annuities to Contributors	
*1925	Strachan, A.	295 00
1927	Swait, C. E.	1,090 92
1926	Thomas, C. E.	813 48
1926	Todd, A. H.	2,812 80
1927	Troup, W. E.	366 96
1926	Turner, J. E.	493 56
1926	Uniacke, R. F.	1,738 20
1926	Valiquette, J.	1,224 96
*1926	Veats, F.	41 95
1926	Waggoner, S. H.	1,452 48
1926	Walton, G.	831 60
1926	Watson, A.	561 48
1925	Watt, G.	825 84
1925	Wenden, G. S.	413 28
1925	Wetmore, T. H.	271 83
1925	White, J.	310 80
1926	White, W. R.	882 00
1925	Wilson, A. V.	414 72
1925	Wiseman, J.	772 44
1925	Wright, C. F.	296 52
1926	Wright, R. J.	1,375 44
1925	Wyatt, W. G.	408 00
1926	Wyld, G.	1,350 12
		218,929 95
Died in	*Annuities to dependents of deceased employees*	
1927	Adam, J. W.	201 50
1926	Alton, G. W.	186 10
1927	Anderson, B.	290 86
1926	Armstrong, T. B.	300 64
1926	Audet, J. P. A.	113 85
1925	Baird, T. M.	149 01
1925	Barthe, R.	649 56
1926	Bartlett, H. J.	207 00
1926	Bastedo, S. T.	799 20
1926	Bennett, J.	67 56
1926	Benoit, L. V.	591 44
1926	Bernier, P. E.	573 99
1926	Bleakney, A. C.	516 32
*1925	Bond, J. M.	174 75
1926	Bowes, L. T.	330 36
1926	Brettingham, F. A.	140 25
1926	Briand, J. M.	601 68
1926	Bruce, R.	222 36
1926	Brunelle, H.	216 12
1925	Campbell, H. S.	525 00
1925	Carey, P.	582 36
1927	Carlin, I.	117 48
1926	Carroll, J. F.	417 84
1926	Carruthers, F. C.	476 88
1927	Carter, B.	273 36
1925	Chambers, E. J.	1,018 94
1926	Charlton, W.	152 88
1926	Chevrier, F. L.	884 04
1925	Copeland, R. E.	185 88
1925	Davies, T. E. S.	473 88
1926	Dawson, H. J.	1,103 40
1925	Dennis, J. A.	387 64
*1926	Devane, M. W.	66 93
1924	Deville, E. G. D.	1,782 96
1928	Dionne, J. L. A.	36 56

Died in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.
	Annuities to dependents of deceased employees	
1926	Dixon, J.	212 16
1925	Dorsey, J. J.	624 84
1926	Dowd, E. C.	284 64
1925	Dowling, D. B.	778 56
1926	Doyle, D. J.	478 92
1927	Drysdale, W.	354 05
1928	Dubuc, J. P. E.	22 09
1925	Duck, A. R. B.	94 32
1928	Eagleson, J. S.	24 39
1926	Edge, V. J.	802 08
1925	Elliott, F.	64 68
1925	Evans, P. H.	212 04
1926	Fafard, O. V.	842 16
1925	Fawcett, E. L.	306 46
1925	Featherston, J. E.	1,027 68
1926	Fee, R.	213 24
1925	Finlayson, R.	547 08
1926	Fiset, A.	141 68
1925	Fisher, W. D.	249 33
1927	Flaglor, J. S.	557 28
1924	Flannery, P. J.	535 56
1926	Forbes, J.	88 99
1926	Fraser, D.	420 60
1926	Frost, J. A.	212 94
1926	Gamache, J. M.	728 94
1926	Gaudin, T.	210 36
1925	Gauthier, G. H.	305 89
1925	Genest, O. A.	255 84
1926	Genest, P. F. X.	648 48
1925	George, A. F.	382 56
1926	Gerald, C.	469 58
1927	Gillespie, D.	214 34
1926	Gould, W.	308 49
1926	Grant, G.	162 93
1926	Gribble, F. J.	193 92
1926	Grier, J. W.	262 21
1925	Harris, G. A.	96 12
1926	Hartwell, G. M.	359 04
1926	Haslam, G. S.	171 12
1925	Haughton, J.	205 80
1926	Hawkins, T. T.	481 68
1926	Haynes, A. T.	278 40
1926	Heavers, T.	452 64
1927	Hennessey, G. F.	504 00
1926	Hillock, P. J.	361 11
1926	Irwin, W. N.	115 08
1924	Ivey, W. J.	398 28
1925	Jack, S. R.	283 44
1927	Jarvis, A. L. F.	2,075 61
1926	Jones, F.	252 36
1925	Jordan, J. E.	86 64
1925	Kane, M.	301 73
1926	Kavanagh, F.	263 64
1924	Kirk, F.	636 84
1926	Kirkpatrick, J. R.	191 76
1926	Laflamme, J. K.	842 64
1924	Lang, J. T. C.	265 56
1926	Langevin, E. V.	273 60
1926	Lapointe, J. A.	167 66
1925	Larkin, J. M.	727 68
1927	Larue, J. N.	375 80
1925	LaRue, J. L. H.	525 00
1926	Latour, J. L.	390 36
1925	Learn, A. J.	208 20
1926	Lecourt, C. E.	615 24

Appendix No. 10—Continued

AMOUNTS paid as superannuation during the year ended March 31, 1928, to employees retired prior to March 31, 1927—*Concluded*

Died in	Name	Amount paid	Died in	Name	Amount paid
	SUPERANNUATION No. 5	$ cts.		SUPERANNUATION No. 5	$ cts.
	Annuities to dependents of deceased employees			*Annuities to dependents of deceased employees*	
1925	Lelièvre, S.	808 44	1925	Rogers, D. T.	284 13
1926	Lemieux, F. X.	494 00	1926	Rose, L. F.	380 88
1926	Lipsett, W. S.	341 25	1926	Royal, J. A.	744 24
1925	Logan, W. J.	318 48	1925	Scott, Thos.	169 32
1926	Love, R. A.	150 48	1926	Scott, W.	141 10
1926	Lower, W. J.	101 40	1927	Sealey, J. C.	229 30
1926	Lutz, H.	256 14	1925	Shepherd, F. B.	238 20
1926	Macdonald, A.	185 28	*1925	Shortt, L. R.	166 04
1926	MacMahon, M. J.	280 68	1925	Sigman, G. A.	90 20
1925	MacMartin, L. J.	258 94	1926	Smart, T. A.	370 50
1927	MacRostie, N. H.	48 57	1926	Smith, A.	172 68
1925	Marchand, A. H.	184 80	1927	Smith, W. B.	307 12
1927	Matheson, T. G.	92 13	1925	Spicer, A.	288 60
1925	Mathieu, L. J.	1,162 43	1925	St. Denis, Jos.	597 36
1924	Meiklejohn, H J.	278 04	1925	Stevenson, J. S.	729 84
1926	Merrigan, J. A.	190 10	1925	Stewart, W. J.	1,680 00
1925	Meyer, F. W.	339 94	1927	Strachan, A.	327 07
1925	Middleton, G.	436 32	1925	Sturgess, A. W.	268 44
1926	Moloney, M.	301 68	1925	Tansey, T. P.	446 04
1926	Morden, J. R.	399 00	1927	Taschereau, E. R. A.	731 21
1926	Morden, W. R.	209 28	1925	Trafton, L.	191 28
1926	Mowat, A.	588 00	1926	Tremaine, A. de B.	699 96
1926	McCann, B. C.	533 45	1926	Vaughan, J. H.	430 82
1925	McDougall, P.	316 56	1927	Veats, F.	397 38
1925	McLay, J.	176 04	1924	Vezina, D.	235 68
1925	McNeill, M. P.	308 04	1925	Walker, D. J.	140 14
1925	McPhee, J. E.	475 37	1926	Wallis, C. J.	305 50
1926	Newton, T.	143 04	1926	Ward, L. H.	158 04
1927	O'Brien, P. J.	873 36	1926	Webster, F. T.	102 36
1926	Orr, R. D.	289 92	1926	Whalley, W.	245 45
1926	Palin, A. F.	483 00	1925	White, J.	258 48
1925	Pansera, A.	265 34	1926	Whitelaw, G.	278 15
1926	Paradis, J.	346 78	1924	Whittaker, E. J.	232 80
1926	Parent, V. A.	355 42	1926	Williams, J. H.	148 86
1926	Partridge, G.	330 60	1924	Williamson, J. G.	165 00
1927	Paterson, A. C.	1,046 50	1925	Winter, H. G.	367 44
1925	Peters, D. L.	239 76	1925	Wise, F. A.	1,481 54
1926	Pope, Sir Joseph	2,799 96	1926	Wismer, D. L.	184 47
1926	Quinn, T.	273 00	1925	Witzig, F. X.	508 44
1926	Regan, P.	367 44	1926	Wright, J. C.	194 48
1926	Reid, J.	285 24	1926	Young, A.	315 72
1926	Renouf, J.	187 44	1925	Young, T. T.	324 22
1926	Reynard, M. C.	798 00			
1926	Robertson, D.	417 96			74,431 00

Appendix No. 10—Continued

ALLOWANCES granted as Superannuation and amounts paid to employees retired during the year ended March 31, 1928

Name and nature of service	Cause of retirement	Age at retirement	Number of years service	Number of years to count	Salary at time of retirement	Average salary	Annual allowance	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
SUPERANNUATION FUND No. 1								
Eagleson, John, Ry. Mail Clerk, Post Office	Age	66	42	.....	1,740 00	1,740 00	1,218 00	1,218 00
Johnson, J. E., Assistant Postmaster, Post Office	Ill health	57	38	.....	3,120 00	3,020 00	2,114 00	1,056 96
Lamire, Joseph, Letter Carrier Overseer, Post Office	Ill health	59	35	.....	1,920 00	1,705 00	1,193 50	596 70
MacCallum, J. S., Examiner, National Revenue	Age	75	41	.....	1,740 00	1,676 66	1,173 60	586 80
MacDonald, Henry, Ry. Mail Clerk, Post Office	Age	69	43	.....	1,740 00	1,740 00	1,218 00	1,218 00
Reading, Thos. J., Letter Carrier, Post Office	Age	64	35	.....	1,500 00	1,456 67	1,019 67	169 94
Taylor, Ellen H., Clerk Gr. 3, Post Office	Age	65	39	.....	1,680 00	1,680 00	1,176 00	784 00
Thompson, David, Enforcement Officer, National Revenue	Age	76	37	.....	410 00	410 00	287 00	143 46
							9,399 77	5,773 86
SUPERANNUATION FUND No. 2								
McCandlish, Alfred, Chief Clerk, National Revenue	Age	66	36	.....	2,580 00	2,423 22	1,696 25	1,180 95
Picken, Thomas, Messenger, Justice	Age	71	37	.....	1,020 00	1,003 88	702 72	292 80
Williams, Mabel Agnes, Prin. Postal Clerk, Post Office	Ill Health	52	35	.....	2,280 00	2,200 00	1,540 00	1,539 96
							3,938 97	3,013 71
SUPERANNUATION FUND No. 5								
Adamson, Samuel, Supt. Hatchery, Marine and Fisheries	Ill health	63	27	$15\frac{4}{12}$	1,860 00	1,851 00	567 64	993 30
Anderson, David, Postal Clerk, Post Office	Age	66	$10\frac{3}{12}$	$10\frac{3}{12}$	1,680 00	1,499 00	307 30	25 60
Andrews, E. L., Inspector, Immig. and Colonization	Ill health	63	$13\frac{9}{12}$	$13\frac{9}{12}$	1,680 00	1,558 23	428 51	441 07
Armstrong, E. W. H., Clerk Gr. 4, Finance	Age	67	45	35	2,000 00	2,000 00	1,400 00	233 32
Baldwin, W. C., Inspector, Immig. and Colonization	Age	71	15	$10\frac{11}{12}$	1,800 00	1,614 39	352 48	86 22
Barnes, T. H., Mail Porter, Post Office	Age	67	$13\frac{2}{12}$	$13\frac{2}{12}$	1,500 00	1,395 20	367 40	91 83
Bartle, J. C., Inspector, National Revenue	Age	70	47	35	3,720 00	3,620 00	2,534 00	1,266 96
Bedard, Charles, Senr. Mail Porter, Post Office	Age	68	$12\frac{9}{12}$	$12\frac{9}{12}$	1,680 00	1,605 00	409 28	
Bent, Frank P., Inspector Postal Services, Post Office	Age	71	55	35	3,120 00	3,016 66	2,111 66	1,231 79
Bishop, H. F., Postmaster, Post Office	Age	70	$13\frac{7}{12}$	$13\frac{7}{12}$	3,500 00	3,500 00	950 83	158 46
Bourbonnière, E., Postal Clerk, Post Office	Ill health	58	$15\frac{8}{12}$	$15\frac{8}{12}$	1,740 00	1,613 50	506 82	173 14
Bowles, H. W., Jun. Inspr. of Weights and Measures, Trade and Commerce	Age	71	$11\frac{11}{12}$	$11\frac{11}{12}$	1,440 00	1,308 00	311 74	233 73

Brears, J. S., Railway Mail Clerk, Post Office	Ill health	34	$15\frac{1}{2}$	$15\frac{1}{2}$	1,800 00	1,649 42	505 82	
Burgess, W. H., Clerk Gr. 2, S.C.R.	Ill health	68	11	11	1,440 00	1,365 00	300 30	25 02
Campbell, D. D., Assistant Postmaster, Post Office	Age	70	$46\frac{9}{12}$	35	3,120 00	3,003 33	2,102 33	1,927 09
Clark, G. A., Sup'y Officer, National Revenue	Age	72	$26\frac{6}{12}$	$26\frac{6}{12}$	2,160 00	2,006 32	1,063 35	746 04
Copp, J. R., Postal Clerk, Post Office	Age	68	$42\frac{8}{12}$	35	1,740 00	1,695 00	1,186 50	296 61
Costigan, T., Clerk Gr. 3, Public Works	Ill health	52	$34\frac{4}{12}$	$34\frac{4}{12}$	1,500 00	1,398 80	960 51	560 28
Croucher, R. A., Inspector of W. & M., Trade and Commerce	Age	71	$10\frac{7}{12}$	$7\frac{11}{12}$	1,740 00	1,566 00	247 95	185 94
Day, J. B., Light-Keeper & Signal Agent, Marine & Fisheries	Ill health	59	$14\frac{8}{12}$	$14\frac{8}{12}$	1,918 00	1,918 00	565 81	141 45
Deacon, F. L., Indian Agent, Gr. 4, Indian Affairs	Ill health	45	$12\frac{3}{12}$	$12\frac{3}{12}$	2,200 00	2,264 26	550 97	
Decary, F., Cleaner and Helper, Public Works	Ill health	49	$12\frac{9}{12}$	$12\frac{9}{12}$	900 00	870 00	221 85	609 84
DeCotret, L. D. R. A., Prin. Postal Clerk, Post Office	Age	67	$40\frac{8}{12}$	35	2,400 00	2,293 33	1,605 33	1,070 16
Depocas, E., Clerk Gr. 2, Pub. Ptg. & St'y	Ill health	52	$15\frac{5}{12}$	$15\frac{5}{12}$	1,600 00	1,600 00	493 33	246 66
De Salaberry, R., Jr. Advisory Counsel, Justice	Ill health	57	$15\frac{8}{12}$	$15\frac{8}{12}$	3,240 00	3,140 00	983 86	163 96
*Despard, A. W., Chief Exhibit Division, Immig. & Colonization	Ill health	51	$23\frac{8}{12}$	$23\frac{8}{12}$	3,240 00	3,240 00	1,538 33	769 14
Dorland, P. N., Ry. Mail Clerk, Post Office	Age	67	$23\frac{3}{12}$	$17\frac{10}{12}$	1,740 00	1,633 50	582 62	655 42
Dowling, E. W., Cashier, National Revenue	Age	70	$16\frac{2}{12}$	$15\frac{7}{12}$	1,980 00	1,826 32	569 20	399 33
Dowrie, D. C., Postal Clerk, Post Office	Age	69	$45\frac{7}{12}$	35	1,680 00	1,680 00	1,176 00	1,176 00
Duchesnes, N., Inspector, Weights & Measures, Trade and Commerce	Age	70	$15\frac{9}{12}$	$15\frac{9}{12}$	1,560 00	1,373 33	416 58	381 81
Dupuis, E., Postal Clerk, Post Office	Ill health	50	$15\frac{10}{12}$	$15\frac{5}{12}$	1,620 00	1,377 00	424 57	
Edwards, J. P., Inspector, National Revenue	Age	70	$11\frac{3}{12}$	$11\frac{3}{12}$	4,000 00	3,723 33	831 54	554 32
Fairley, W. H., District Poultry Inspector, Agriculture	Ill health	54	$10\frac{2}{12}$	$10\frac{2}{12}$	2,520 00	2,252 39	454 23	282 03
Fairweather, J. H., Supt. Savings Bank Div., Post Office	Age	68	$51\frac{8}{12}$	35	3,720 00	3,630 00	2,541 00	635 25
*Filson, H. K., Prison-keeper, Justice	Ill health	47	$13\frac{4}{12}$	$13\frac{4}{12}$	1,680 00	1,423 94	379 72	235 76
Flanagan, P., Cleaner and Helper, Public Works	Ill health	57	$10\frac{7}{12}$	$6\frac{7}{12}$	1,200 00	1,035 00	136 27	102 15
Flynn, E., Caretaker, Public Works	Age	71	$15\frac{11}{12}$	$15\frac{11}{12}$	1,380 00	1,226 00	390 28	221 13
Fraser, Mary, Clerk, Gr. 4, Post Office	Age	70	$25\frac{7}{12}$	35	1,620 00	1,417 13	992 01	559 33
Fraser, P. T., Light-Keeper, Marine and Fisheries	Ill health	61	37	35	1,580 00	1,481 00	1,040 90	780 66
Gagnon, M., Postal Clerk, Post Office	Age	70	$30\frac{6}{12}$	$30\frac{6}{12}$	1,740 00	1,640 00	1,000 40	333 44
Garrioch, J., Hatchery Assistant, Marine & Fisheries	Ill health	44	$11\frac{10}{12}$	$11\frac{10}{12}$	1,440 00	1,296 00	306 72	536 76
Glover, W. J., Financial Superintendent, Post Office	Age	65	41	35	5,700 00	5,700 00	3,990 00	997 50
Godfrey, E. H., Chief of Division, Agricultural Statistics, Trade and Commerce	Age	65	$20\frac{10}{12}$	$20\frac{10}{12}$	3,600 00	3,555 09	1,490 25	154 15
Greer, Jas., Customs Appraiser, National Revenue	Age	74	41	35	2,580 00	2,356 67	1,649 67	549 88
*Harris, W. F., Examiner, National Revenue	Age	69	20	20	1,620 00	1,596 00	638 40	106 40
Hartley, Robert, Grain Weighman, Trade and Commerce	Age	72	$22\frac{6}{12}$	$22\frac{6}{12}$	2,460 00	2,247 00	1,011 15	421 30
Hawkins, Jos. R., Caretaker, Health	Age	70	$12\frac{7}{12}$	$12\frac{7}{12}$	1,380 00	1,235 00	310 81	129 50
Holbrook, J. A., Caretaker, National Defense	Ill health	59	$14\frac{9}{12}$	$14\frac{9}{12}$	1,440 00	1,344 00	396 48	264 32
Jarvis, C. D., Cashier and Computing Clerk, National Revenue	Ill health	63	$14\frac{4}{12}$	$13\frac{10}{12}$	1,800 00	1,650 00	456 50	114 12
Jenkins, T., Postal Clerk, Post Office	Age	70	51	35	1,680 00	1,680 00	1,177 17	1,078 99
Joss, Daniel, Caretaker, Public Works	Age	70	$18\frac{11}{12}$	$11\frac{3}{12}$	1,380 00	1,257 42	282 92	12 17
Joubert, Agnes A., Clerk Gr. 2, Post Office	Ill health	44	$15\frac{1}{12}$	$15\frac{1}{12}$	1,300 00	1,165 00	351 44	87 84
Kirkpatrick, R. A., Sr. Assistant Engineer, Public Works	Ill health	36	$14\frac{3}{12}$	$14\frac{3}{12}$	2,820 00	2,646 80	754 34	599 27
Kniewasser, A., Clerk Gr. 2, Interior	Age	72	$18\frac{7}{12}$	$18\frac{7}{12}$	1,600 00	1,600 00	594 67	594 67
Laberge, P., Mail Porter, Post Office	Age	71	$14\frac{10}{12}$	$14\frac{5}{12}$	1,500 00	1,405 16	405 15	91 48
Labonté, L., Postal Clerk, Post Office	Age	70	$34\frac{7}{12}$	35	1,680 00	1,680 00	1,176 00	490 00
L'Africain, N., Examiner, National Revenue	Age	65	$39\frac{7}{12}$	35	1,920 00	1,863 01	1,302 00	1,107 73
Laidlaw, J. W., Canal Superintendent, Rys. and Canals	Age	65	$13\frac{8}{12}$	$10\frac{8}{12}$	1,800 00	1,692 00	355 32	177 66
Laporte, J., Car Truckman, National Revenue	Age	70	$21\frac{2}{12}$	$21\frac{2}{12}$	1,500 00	1,382 32	585 18	411 91
*Laurier, C. A., Can. Government Agent, Immig. & Colonization	Age	67	26	$16\frac{3}{12}$	3,020 00	2,818 00	911 15	455 52

Appendix No. 10—Continued

ALLOWANCES granted as Superannuation and amounts paid to employees retired during the year ended March 31, 1928—*Con.*

Name and nature of service	Cause of retirement	Age at retirement	Number of years service	Number of years to count	Salary at time of retirement	Average salary	Annual allowance	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
SUPERANNUATION FUND No. 5—*Continued*								
Larue, C. H., Postal Clerk, Post Office	Ill health	33	15 6/12	15 6/12	1,620 00	1,549 43	475 15	60 07
Leake, W. W., Postal Clerk, Post Office	Ill health	57	31 4/12	31	1,740 00	1,665 00	1,032 30	946 22
Lindsay, R. W., Light-Keeper, Marine and Fisheries	Ill health	55	39	35	1,700 00	1,592 00	1,114 40	557 16
Lock, H., Letter Carrier, Post Office	Ill health	59	20 9/12	20 9/12	1,500 00	1,397 87	580 12	170 80
Logan, R. J., Lockmaster, Railways and Canals	Age	70	14 9/12	14 9/12	1,200 00	1,075 00	317 12	26 42
Lorange, O., Prin. Account Clerk, Post Office	Age	65	43 9/12	35	2,400 00	2,306 66	1,614 67	538 20
Lounds, C. M. R., Senr. Postal Clerk, Post Office	Age	69	52 5/12	35	2,040 00	1,940 00	1,358 00	678 96
Lytle, S. B., Assist. Customs Appraiser, National Revenue	Age	68	30 1/12	30 1/12	2,280 00	2,129 00	1,275 52	1,062 90
Macdonald, Chas. A., Supt. of Lights, Marine and Fisheries	Ill health	47	15 9/12	15 9/12	3,060 00	2,363 68	744 56	658 42
Mackellar, D., Elevator Operator, Public Works	Age	70	14	8 5/12	1,260 00	1,135 00	191 06	
Maclachlan, J. M., Immig. Agent, Gr. 3, Immig. & Colonization	Age	74	26 5/12	26 5/12	3,500 00	3,370 00	1,780 48	1,335 33
*MacRostie, N. H., Clerk Gr. 2, Post Office	Ill health	39	14 7/12	14 7/12	1,440 00	1,332 83	388 70	53 98
Madill, T., Lockmaster, Railways and Canals	Age	76	11 3/12	11 3/12	1,200 00	896 72	201 76	61 28
Marineau, P. O., Inspector, Postal Services, Post Offices	Ill health	63	33 2/12	33	3,120 00	3,027 52	1,998 16	623 06
Marquette, E. J. M., Supy. Postal Clerk, Post Office	Age	71	10 4/12	10 4/12	1,620 00	1,468 00	303 39	202 24
Meadows, A. H., Postal Clerk, Post Office	Ill health	64	44 1/3	35	1,800 00	1,695 00	1,186 50	296 61
Mitchell, A., Postal Clerk, Post Office	Age	67	35 1/2	35	1,680 00	1,680 00	1,177 17	1,078 99
Moffett, D., Signal Agent, Marine and Fisheries	Age	67	15	15	1,380 00	1,250 00	375 00	62 50
Moore, S. J., District Seed Inspector, Agriculture	Age	70	21 1/12	21 1/12	3,240 00	3,016 00	1,271 75	
Morrison, J. A., Letter Carrier, Post Office	Age	65	15 5/12	15 5/12	1,500 00	1,388 00	427 97	249 62
Moyer, Pearl J., Clerk-Stenographer Gr. 2, Insurance	Ill health	34	12 1/2	12 1/2	1,300 00	1,275 00	318 75	876 54
Mullan, J., Clerk Gr. 2, Immigration and Colonization	Ill health	60	21 1/4	21 1/4	1,440 00	1,314 00	558 45	279 18
Murray, J. A. F., Clerk Gr. 3, Immigration & Colonization	Ill health	48	16 1/3	16 1/3	1,620 00	1,552 00	506 99	
Murray, M., Light-Keeper, Marine and Fisheries	Age	81	25 1/2	13 5/12	620 00	620 00	166 37	69 30
Myrick, J., Light-Keeper, Marine and Fisheries	Age	70	31 5/12	31 5/12	1,820 00	1,722 00	1,081 99	
McCharles, John, Head Clerk, Marine and Fisheries	Ill health	64	33 1/3	33 1/3	2,920 00	2,896 00	1,950 42	1,137 71
McDougall, Alex., Supt. of Hatcheries, Gr. 3, Marine & Fisheries	Ill health	56	18 2/3	11 1/2	1,740 00	1,731 00	386 59	644 20
McDougall, Allan, Hatchery Assistant, Marine and Fisheries	Age	73	19 1/3	19 1/3	1,440 00	1,125 40	435 16	
McElroy, P. J., Computing Clerk, National Revenue	Age	71	34 1/2	34 1/2	2,160 00	2,006 32	1,370 98	961 83
McIntosh, Daniel, Caretaker, Public Works	Age	81	11 1/2	6	1,380 00	1,235 00	148 20	61 75
McLennan, John, Caretaker, Public Works	Age	72	13 2/3	13 2/3	1,380 00	1,205 00	329 37	302 06
McMullin, Alex., Postal Clerk, Post Office	Age	70	34 1/2	35	1,740 00	1,695 00	1,186 50	296 61
Nearing, James, Light-Keeper, Marine & Fisheries	Age	65	15 2/3	15 2/3	1,995 00	1,895 00	593 76	49 48
Nuttall, Gordon A., Postal Clerk, Post Office	Ill health	32	11 1/12	11 1/12	1,740 00	1,533 90	340 01	271 02

Oakes, Joseph, Superintendent, Hatchery, Marine & Fisheries	Ill health	51	$14\frac{11}{12}$	$14\frac{11}{12}$	1,680 00	1,824 00	544 16	952 14
O'Halloran, Geo. F., Commissioner of Patents, Patent and Copyright Office	Ill health	64	$24\frac{5}{6}$	$24\frac{5}{6}$	8,000 00	7,600 00	3,774 67	3,774 60
Parker, Alfred, Prin. Postal Clerk, Post Office	Ill health	64	$37\frac{1}{4}$	35	2,400 00	2,310 00	1,617 00	404 25
Perrin, C. N., Postal Clerk, Post Office	Age	66	$37\frac{3}{4}$	35	1,740 00	1,695 00	1,186 50	296 61
Phair, L. B. C., Senr. Postal Clerk, Post Office	Ill health	55	39	35	2,040 00	1,956 67	1,369 66	
Rioux, J. B., Elevator Operator, Public Works	Age	75	$28\frac{1}{4}$	$14\frac{3}{4}$	1,440 00	1,285 00	376 93	219 87
Roberts, L. H., Postal Clerk, Post Office	Age	67	36	35	1,740 00	1,695 00	1,186 50	296 61
Robertson, Allan B., Ry. Mail Clerk, Post Office	Ill health	37	10	$8\frac{7}{12}$	1,800 00	1,471 74	252 65	
Robineau, F., Clerk Gr. 2, Railways and Canals	Ill health	50	$21\frac{3}{4}$	$21\frac{3}{4}$	1,440 00	1,302 97	564 62	482 64
Rowan, W. E., Preventive Officer, National Revenue	Age	73	$30\frac{5}{12}$	$30\frac{5}{12}$	1,500 00	1,344 00	817 60	408 78
Sanders, E. L., Chief Clerk, National Revenue	Age	71	45	35	3,720 00	3,611 93	2,528 35	1,773 91
Saunders, G. H., Postal Clerk, Post Office	Ill health	48	$14\frac{1}{2}$	$14\frac{1}{2}$	1,740 00	1,631 00	472 99	197 05
Scullion, W. J., Special Exciseman, Gr. 1, National Revenue	Age	70	45	35	2,160 00	2,057 22	1,440 05	820 00
*Sealey, Jas. C., District Inspector of W. & M., Trade and Commerce	Age	69	$17\frac{1}{6}$	$11\frac{3}{12}$	2,280 00	2,244 00	497 42	41 45
Selleck, E. J., Clerk Gr. 2, Railways and Canals	Ill health	47	$14\frac{1}{2}$	$14\frac{1}{2}$	1,380 00	1,196 36	338 95	197 68
Sims, T. C., Examiner, National Revenue	Ill health	50	$17\frac{5}{6}$	$17\frac{5}{6}$	1,740 00	1,628 00	580 65	338 66
Skinner, W. H., Assistant Postmaster, Post Office	Age	67	46	35	2,940 00	3,033 33	2,123 33	353 88
Smith, Frank, Postmaster, Gr. 3, Post Office	Age	70	$14\frac{5}{6}$	$14\frac{5}{6}$	2,280 00	2,280 00	676 40	619 96
Smith, John, Clerk, Gr. 1, Post Office	Age	71	$11\frac{5}{6}$	$11\frac{5}{6}$	1,020 00	960 80	227 39	114 90
Stanley, A. T., Lockmaster, Railways and Canals	Age	86	$15\frac{1}{12}$	$8\frac{1}{6}$	1,200 00	901 46	147 23	6 72
Stevens, Charles, Letter Carrier, Post Office	Ill health	56	$14\frac{1}{6}$	$13\frac{1}{12}$	1,500 00	1,380 00	384 10	288 00
Stewart, F. D., Assistant Postmaster, Post Office	Ill health	43	$22\frac{3}{4}$	$22\frac{3}{4}$	2,820 00	2,702 00	1,229 41	717 15
Stewart, Jas., Postmaster, Post Office	Age	72	$20\frac{1}{4}$	$20\frac{1}{4}$	3,000 00	3,120 00	1,216 62	1,013 80
Stewart, Jas., Caretaker, Public Works	Age	71	$15\frac{5}{12}$	$8\frac{5}{12}$	1,440 00	1,290 00	217 15	108 54
Stewart, J. D., Sub-collector, Gr. 2, National Revenue	Age	66	$25\frac{1}{2}$	$25\frac{1}{2}$	2,040 00	1,900 00	969 00	403 75
Sutton, Edgar W., Senr. Postal Clerk, Post Office	Ill health	59	38	34	2,040 00	1,923 34	1,307 87	1,198 78
Thivierge, J. A., Travelling Paymaster, Gr. 2, Public Works	Ill health	51	$22\frac{1}{4}$	$22\frac{1}{4}$	3,000 00	2,980 20	1,326 19	1,094 04
Thompson, T. H., Letter Carrier, Post Office	Ill health	43	$11\frac{2}{3}$	$10\frac{7}{12}$	1,500 00	1,392 00	294 64	98 20
Thorp, G. T., Collector, National Revenue	Age	70	$13\frac{1}{2}$	$13\frac{1}{2}$	2,640 00	2,508 00	677 16	169 29
Traversy, F. X., Examiner, National Revenue	Age	72	$33\frac{2}{3}$	$20\frac{1}{2}$	1,740 00	1,552 64	636 59	446 56
Traynor, S. M., Superintendent of Mails, Post Office	Ill health	63	35	35	3,000 00	2,910 00	2,037 00	
Valentine, Chas., Postal Clerk, Post Office	Ill health	50	$20\frac{1}{6}$	$20\frac{1}{6}$	1,560 00	1,447 00	583 62	632 19
Van Loon, Wm. C., Indian Agent, Gr. 3, Indian Affairs	Age	70	$23\frac{11}{12}$	$23\frac{11}{12}$	1,440 00	1,344 00	642 88	321 42
Wade, A. R, Head Clerk, Interior	Age	72	41	35	2,880 00	2,880 00	2,016 00	2,016 00
Warren, M., Lockmaster, Railways and Canals	Age	67	$32\frac{7}{12}$	$32\frac{7}{12}$	1,200 00	1,050 00	684 25	342 12
White, Mary, Library Helper, National Defence	Ill health	52	$19\frac{7}{12}$	$19\frac{3}{4}$	1,020 00	1,002 23	387 56	161 45
*Wilson, A. E., Senr. Postal Clerk, Post Office	Age	66	43	35	2,040 00	1,933 33	1,353 33	451 08
Wilson, W. F., Chief Customs Inspector, National Revenue	Ill health	53	36	35	5,920 00	5,818 33	4,072 83	2,206 09
Wodehouse, W. T., Letter Carrier, Post Office	Ill health	48	$21\frac{1}{4}$	$21\frac{1}{4}$	1,500 00	1,379 20	586 16	439 56
Woodrow, R. D., Prin. Postal Clerk, Post Office	Age	70	53	35	2,280 00	2,280 00	1,596 00	1,333 80
York, Brown L., Cont. Timber & Grazing Br., Interior	Age	65	41	35	4,320 00	4,211 50	2,948 05	2,100 08
							124,731 32	66,829 46

Appendix No. 10—Continued

ANNUITIES granted and amounts paid to dependents of employees who died during the year ended March 31, 1928

Name of Contributor and Nature of Service	Dependent's Relationship to contributor	Age at death	Number of years service	Number of years to count	Final annual salary	Average salary	Annual Allowance to dependents	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
Abraham, R. H., Indian Agric. Agent, Indian Affairs	Widow	46	10 10/12	10 10/12	2,880 00	2,807 35	456 20	462 25
Adam, A. R., Special Exciseman, Gr. 1, National Revenue	"	60	25 9/12	25 7/12	2,040 00	1,878 40	480 55	1,158 56
Avard, W., Sub-Collector, National Revenue	"	72	24	23 9/12	1,260 00	1,102 26	259 02	178 91
Bainbridge, C. H., Clerk, Gr. 1, Patent and Copyright Office	"	63	13 11/12	13 11/12	1,200 00	1,035 80	144 15	106 15
Beausoleil, J. P., Ry. Mail Clerk, Post Office	"	47	17 11/12	17 11/12	1,800 00	1,697 20	304 08	119 10
Bell, H. L., Cleaner, Public Works	"	62	17	9 5/12	1,200 00	1,025 80	96 59	87 14
Blake, A. A., Cleaner and Helper, National Defence	"	51	11	11	1,200 00	1,068 87	176 36	32 70
Bousfield, C., Veterinary Inspector, Agriculture	"	60	13 8/12	10 9/12	2,400 00	2,319 43	249 34	278 91
Brophy, A., Chief Clerk, Secretary of State	"	56	30 5/12	30 5/12	3,800 00	3,521 39	1,499 52	1,178 78
Brown, J. C., Caretaker, Public Works	"	65	15 10/12	8 10/12	1,380 00	1,207 26	127 97	112 45
Buckley, T. J., Postal Clerk, Postal Office	"	50	27 1/12	27 1/12	1,740 00	1,631 07	441 75	229 45
Burke, R. J., Clerk, National Revenue	"	72	17 5/12	17 10/12	1,740 00	1,592 93	277 43	128 97
Burns, L., Messenger, Privy Council	"	67	36	17 9/12	1,300 00	1,225 00	214 27	160 16
Butler, D. J., Examiner, National Revenue	"	64	16 10/12	16 10/12	1,740 00	1,453 16	287 72	
Butler, T., Senr. Examiner, National Revenue	"	72	44	17 6/12	1,920 00	1,868 22	326 94	192 44
Connor, G. K., Supervising Inspector, Immigration and Colonization	"	62	15 12/12	10 7/12	1,800 00	1,765 55	186 85	193 87
Corriveau, A. F. J., Railway Mail Clerk, Post Office	"	36	13 9/12	13 9/12	1,800 00	1,635 33	337 27	199 42
Coté, L., Light-keeper, Marine and Fisheries	"	55	25 7/12	25 7/12	1,918 00	1,805 03	692 68	489 69
Covey, A., Light-keeper, Marine and Fisheries	"	51	14 10/12	8 3/12	1,700 00	1,652 66	134 96	68 19
Cowling, A. J., Postal Clerk, Post Office	"	63	11 6/12	11 6/12	1,620 00	1,484 22	170 69	
D'Aigle, D. I., Inspector Postal Service, Post Office	"	65	39 9/12	17 6/12	2,520 00	1,950 83	341 39	156 42
Dares, H. B., Letter Carrier, Post Office	"	36	15 2/12	15	1,500 00	1,406 97	295 46	
Davies, W. B., Assistant Engineer, Railways and Canals	"	38	15 3/12	15 3/12	2,700 00	2,523 22	538 69	322 92
D'Orsonnens, A., Senior Relief Map Maker, Interior	"	62	22 11/12	22 11/12	2,640 00	2,319 88	531 64	143 24
Egglefield, L., Letter Carrier, Post Office	"	35	13 9/12	13 7/12	1,500 00	1,361 20	258 86	249 49
Farnworth, F. H., Customs and Excise, Cashier National Revenue	"	58	14 8/12	14 10/12	2,100 00	1,757 80	257 81	94 51
Fink, G. L., Clerk, Gr. 2, Public Printing and Stationery	"	64	11 10/12	9 10/12	1,440 00	1,367 61	128 78	
Fixter, J., Chief Supervisor, Agriculture	"	67	34 9/12	24 1/12	3,840 00	3,713 16	894 25	574 53
Force, E. A., Sub-Collector, National Revenue	"	66	17 7/12	17 9/12	2,040 00	1,900 80	465 70	186 24
Fraser, F. R., Special Customs and Excise Clerk, Grade 2, National Revenue	Children	33	13 6/12	13	2,160 00	1,964 13	255 33	
Fraser, Simon, Letter Carrier, Post Office	Widow	64	10 8/12	10 8/12	1,500 00	1,329 61	139 61	
Gillis, A. D., Clerk, National Revenue	"	69	11	11	1,680 00	1,527 03	167 97	161 82
Good, Jos., Grain Weighman, Trade and Commerce	"	59	16 3/12	16 11/12	2,220 00	1,980 10	318 47	1,042 59

Gorman, A. M., Special Exciseman, Grade 1, National Revenue..	"	63	36 6/12	18 6/12	2,160 00	2,074 01	382 82	
Goyette, Hy., Elevator Operator, Public Works.....	"	53	15 9/12	8 1/12	1,260 00	1,097 13	146 73	102 88
Graham, L. D., Overseer of Letter Carriers, Post Office.....	"	46	20 10/12	20 10/12	1,800 00	1,699 58	424 90	381 40
Graham, M. H., Chief of Wild Life Division, Interior.....	"	57	20 9/12	20 9/12	3,420 00	3,159 45	655 58	482 85
Hair, Herbert, Hydrometric Recorder, Railways and Canals.....	"	44	13 5/12	13 5/12	1,680 00	1,602 26	257 96	61 70
Harvey, Geo. H., Clerk, Grade 2, Marine and Fisheries.....	"	61	17 8/12	10 11/12	1,440 00	1,226 40	133 88	98 12
Holland, W. J., Senior Postal Clerk, Post Office.....	"	53	23 8/12	23 8/12	1,920 00	1,868 57	530 66	606 44
Hudon, M. L. E., Assistant Inspector, National Revenue.....	"	60	29 6/12	30	2,760 00	2,654 94	1,194 73	748 31
Hugg, Claire, Curator, Reading Room, House of Commons.....	"	69	46	35	1,440 00	1,409 11	493 19	190 39
Hurst, L. B., Special Exciseman, National Revenue.....	"	57	35 10/12	17 6/12	2,640 00	2,431 13	456 84	78 60
Hutchinson, D. L., Weather and Current Observer, Marine and Fisheries.....	"	73	39	21 6/12	3,000 00	2,896 38	622 72	
Isaac, J. S., Postal Clerk, Post Office.....	"	37	20	20	1,680 00	1,601 90	448 52	524 38
Jackson, Orlando, Stationary Engineer, Public Works.....	"	68	13 9/12	13 9/12	1,500 00	1,423 98	187 49	
Johnson, W. E., Cargo Inspector, Agriculture.....	"	66	14 11/12	14 11/12	2,167 50	2,062 13	307 60	123 88
Johnston, Charles, Caretaker, Public Works.....	"	71	32 1/12	16 5/12	1,380 00	1,203 00	197 50	187 53
Keigan, D. G., Examiner, National Revenue.....	"	61	16 7/12	16 1/12	1,740 00	1,610 77	310 87	52 64
Kirkpatrick, W. L., Railway Mail Clerk, Post Office.....	"	30	10 1/12	9 3/12	1,800 00	1,550 84	143 45	125 67
Labelle, J. A., Clerk, Grade 2, Public Printing and Stationery....	"	43	13 2/12	13 2/12	1,480 00	1,382 67	218 46	109 80
Lalonde, J. M., Clerk, Grade 4, Marine and Fisheries.....	"	59	37	35	2,100 00	2,100 00	367 50	276 60
Laprise, E.., Lightkeeper, Grade 2, Marine and Fisheries.....	Child.....	51	23 1/12	23 1/12	1,700 00	1,251 86	57 79	93 72
Lister, D. T., Examiner, National Revenue.....	Widow.....	42	16 4/12	15 6/12	1,740 00	1,581 06	245 06	99 38
Loughran, F., Accountant, Finance.....	"	73	43 9/12	17 6/12	1,900 00	1,900 00	332 50	665 79
Lunan, J. E., Steamship Inspector General, Marine and Fisheries..	"	48	14 8/12	14 8/12	3,360 00	3,128 47	458 84	377 20
Mackenrot, W. H., Grain Weighman, Trade and Commerce.....	"	74	15 2/3	15 2/3	2,400 00	2,116 45	320 99	404 55
MacIntyre, A. C., Light-keeper, Marine and Fisheries.....	Children.....	70	14 1/2	8 1/2	1,580 00	1,580 00	104 28	117 46
MacQueen, J. D., Deputy Grain Inspector, Trade and Commerce.	Widow.....	49	17 11/12	11 7/12	2,880 00	2,392 13	277 09	198 12
Maitland, F. P. A., Examiner, National Revenue.....	"	42	10 10/12	10 10/12	1,740 00	1,580 96	256 87	156 01
Mallette, L., Clerk of Works, Grade 1, Public Works.....	"	63	12 1/12	12 1/12	1,620 00	1,559 93	201 49	101 30
May, O., Clerk, Grade 4, Post Office.....	"	48	31 1/3	31 1/3	1,920 00	1,745 74	658 40	441 13
Morton, G., Mail Porter, Post Office.....	"	68	35 1/3	18 10/12	1,500 00	1,447 80	272 66	166 37
Moule, W. J., Senior Map Draughtsman, Interior.....	"	57	22	22	2,160 00	2,042 77	449 41	397 45
Mundell, E., Light-keeper, Marine and Fisheries.....	"	70	24 1/3	13 1/3	1,346 00	1,157 05	152 34	92 92
McDonald, A. B., Telegraph Inspector, Public Works.....	"	66	45 1/4	24 1/12	2,220 00	2,216 21	747 23	2,359 42
McEvoy, Samuel T., Tester, Building Material, Public Works....	"	65	21 1/2	20 9/12	2,160 00	2,058 45	420 26	97 15
McLean, Geo. F., File Clerk, Marine and Fisheries.....	"	68	12 1/2	12 1/2	1,440 00	1,262 20	157 78	152 86
McNab, Geo. F., Sub-Collector, National Revenue.....	"	59	16 7/12	16 5/12	1,740 00	1,577 42	310 75	137 80
Nisbet, John, Caretaker, Public Works.....	"	61	10 3/4	10 3/4	1,380 00	1,215 64	181 53	119 01
Nuttall, W. A., Foreman Mechanic, Grade 2, Marine and Fisheries	"	56	23 1/3	23 1/3	1,800 00	1,803 29	420 77	243 08
Ogilvie, E. F., Express and Postal Computing Clerk, National Revenue.....	"	62	19 1/2	19 1/2	1,920 00	1,675 36	326 69	251 33
O'Sullivan, Eugene, Junior Engineer, Public Works.....	"	57	10 1/4	10 1/4	2,160 00	1,973 81	212 18	
Painchaud, C. F., Sub-Collector, National Revenue.....	"	63	37	35	1,500 00	1,354 39	568 83	297 04
Patterson, H. W., Clerk, Grade 4, National Revenue.....	"	56	28	27 7/12	1,920 00	1,801 40	596 25	561 38
Pearce, W. J. H., Senior Postal Clerk, Post Office.....	"	63	40	35	2,040 00	1,930 00	337 75	168 84
Poissant, Irenée, Postal Clerk, Post Office.....	"	39	17 1/4	17 1/4	1,680 00	1,589 56	411 20	428 80
Powell, H. H., Assistant Inspector of Income Tax, National Revenue.....	"	74	11 1/2	11 1/2	2,400 00	2,400 00	252 00	135 23
Prairie, Stan., Postal Clerk, Post Office.....	"	36	14 2/3	14 2/3	1,620 00	1,549 26	340 83	

Appendix No. 10—Continued

ANNUITIES granted and amounts paid to dependents of employees who died during the year ended March 31, 1928—*Con.*

Name of Contributor and Nature of Service	Dependent's Relationship to contributor	Age at death	Number of years service	Number of years to count	Final annual salary	Average salary	Annual Allowance to dependents	Amount paid during the fiscal year
					$ cts.	$ cts.	$ cts.	$ cts.
Pretty, Jos. M., Principal Clerk, Post Office	Widow	48	24⅝	24⅝	2,400 00	2,147 47	799 93	662 16
Robitaille, Ernest, Postal Clerk, Post Office	"	53	14 5/12	14 5/12	1,140 00	1,006 12	145 05	178 47
Rose, W. H., Railway Mail Clerk, Post Office	"	58	29½	28⅝	1,800 00	1,682 45	582 13	406 86
Ross, James D., Veterinary Inspector, Agriculture	"	64	19½	13¾	2,400 00	2,400 00	330 00	353 06
Ross, Robert H., Railway Mail Clerk, Post Office	"	61	39	17½	1,740 00	1,739 03	365 20	371 05
Shipman, Chas. W., Messenger, Agriculture	"	52	10⅝	10⅝	1,200 00	1,002 48	108 60	91 67
Skelly, John J., Departmental Purchasing Agent, Grade 3, Marine and Fisheries	"	52	33⅛	33⅛	3,420 00	3,218 01	1,067 32	101 21
Smith, Albert E., Postal Clerk, Post Office	"	48	14 1/12	14	1,680 00	1,595 23	314 52	317 91
Somers, Frank, Head Clerk, National Revenue	"	60	39	17½	3,000 00	2,761 29	483 22	116 91
Speedy, L. G., Examiner, National Revenue	"	45	15 7/12	15½	1,740 00	1,581 33	335 77	135 24
Stanford, Edward, Draughtsman, Interior	"	47	12¼	9⅛	1,920 00	1,639 93	210 46	187 18
Stock, J. J., Div. Appraiser, National Revenue	"	62	23 1/12	23 1/12	2,700 00	2,261 64	626 47	326 67
Tague, Hector O., Clerk, Grade 3, Interior	"	36	12½	12½	1,500 00	1,380 00	241 64	237 53
Taylor, C. H., Postal Cashier, National Revenue	"	58	14 7/12	14 7/12	1,980 00	1,845 80	269 17	79 59
Tremblay, Jules, Assistant Chief of French Journals, House of Commons	"	48	13 7/12	13 7/12	3,420 00	3,315 87	675 60	228 95
Trudeau, H., Letter Carrier, Post Office	"	36	14⅓	14⅓	1,440 00	1,345 11	289 17	348 14
Ware, J. A., Examiner, National Revenue	"	44	20 5/12	19¾	2,460 00	1,898 02	449 83	233 63
Warren, Robert V., Computing Clerk, National Revenue	"	59	40	35	2,160 00	2,034 66	712 13	
Waterfield, C. W., Senior Customs and Excise Clerk, National Revenue	"	68	12 7/12	12 7/12	2,220 00	1,848 38	279 10	
Webb, Sam. A., Inspector of Weights and Measures, Trade and Commerce	"	68	13 5/12	13 5/12	1,740 00	1,610 67	216 10	188 40
Welch, Robert, Regulating Weir Attendant, Railways and Canals	"	73	17⅞	12 11/12	1,110 00	926 45	111 94	118 45
Westman, Thomas, Inspector, National Revenue	"	65	43	17½	3,720 00	3,631 29	762 57	166 02
White, James, Technical Advisor, Justice	"	65	43	35	6,000 00	6,000 00	2,100 00	
Wickens, Frank, Clerk, Grade 1, National Defence	"	52	10¼	8½	1,200 00	1,066 77	136 01	
Williams, Geo. T., Letter Carrier, Post Office	"	47	13¾	13¾	1,500 00	1,383 47	190 23	128 85
Worrel, Jas., Inspector of Weights and Measures, Trade and Commerce	"	56	13⅜	13⅜	1,740 00	1,599 86	218 65	243 36
							40,032 28	25,944 74

Appendix No. 10—Continued

AMOUNTS paid as Gratuities to Contributors or Dependents of Deceased Employees during the fiscal year ended March 31, 1928

Name of Contributor	Department	To whom paid	Amount paid
			$ cts.
Birnie, Wm. Alex	Post Office	Widow	933 75
Blatherwick, J. H	National Revenue	"	1,533 33
Bowman, Wm. H	Railways and Canals	Contributor	366 66
Brannon, Thos. P	Public Works	"	348 33
Caldwell, Norman	Interior	Widow	419 69
Clark, Walter	Post Office	"	536 67
Cleary, Michael	Railway and Canals	Contributor	439 37
Cook, Wm. S	Post Office	Widow	102 92
Dufort, E. R	Justice	Contributor	148 75
Dunlop, Jas	National Revenue	"	2,291 67
Fawcett, Walter	Public Works	"	157 50
Featherstonhaugh, E. H	S. C. R	"	2,479 13
Gervais, Gilbert	Railways and Canals	"	323 75
Grey, Stuart	Public Works	Widow	1,250 00
Helmsing, H. F	Indian Affairs	Contributor	1,380 75
Holman, John	Health	"	213 33
Hoskins, Harry	National Revenue	Children	1,120 00
Hubert, Emile	Post Office	Widow	200 00
IEvers, H. W	National Revenue	"	1,437 92
Jarvis, Edward	Post Office	Contributor	358 75
Jordan, Frank	National Defence	Widow	1,566 66
Kelly, H. T	National Revenue	"	559 16
Lamoureux, Joachim	Justice	Contributor	90 00
Lemay, Jos. O	Post Office	Widow	562 50
Lennox, Norman	Agriculture	"	769 16
Loiselle, Leo	Justice	Contributor	100 00
Maclaren, Hy	Health	Widow	2,561 67
Masson, J. A	National Revenue	"	1,685 83
Mears, Hy. M	Trade and Commerce	Contributor	653 33
Messier, Romulus	Post Office	Widow	812 50
Moores, C. R	National Revenue	"	1,026 67
McAdam, John	Post Office	Contributor	690 00
McDonald, Michael J	Agriculture	Widow	1,715 94
McKay, C. W	National Revenue	Contributor	900 00
McLellan, Allen D	Marine and Fisheries	"	864 18
Nash, Chas	Public Works	"	566 67
Pitt, Wm	National Revenue	Widow	1,039 16
Pothier, Raoul	Public Works	"	240 00
Potts, Frank	National Revenue	Contributor	1,796 08
Quick, A. M	National Revenue	"	1,012 50
Redshaw, Chas. H	Public Works	Widow	340 42
Riddell, John M	Marine and Fisheries	Contributor	140 83
Robb, John	Post Office	"	1,305 00
Rochon, Geo	Railways and Canals	"	431 66
Ross, Isobel J	National Revenue	"	293 33
Seymour, Hy. P	Interior	"	1,152 66
Smith, A. A. S	National Revenue	Widow	1,053 33
Smith, E. E	Immigration & Colonization	"	656 25
Steele, Herbert	Post Office	Contributor	840 00
Stoodley, John L	Post Office	Children	449 17
Street, Fred C	Pub. Ptg. and Sty	Contributor	533 75
Wakelin, Chas	Trade and Commerce	Widow	1,000 00
Weston, J. A	National Revenue	"	201 25
Whitford, Fred	Indian Affairs	Contributor	330 00
Young, W. A	National Revenue	Widow	133 33
Zwicker, F. R	National Defence	"	735 00
			44,850 26

Appendix No. 10—Continued

Withdrawal Allowances paid to Contributors or Dependents of Deceased Employees during the fiscal year ended March 31, 1928

Name of contributor	Department	To whom paid	Amount paid
			$ cts.
Archibald, Caroline P.	Agriculture	Contributor	506 66
Atto, A. J.	Post Office	"	105 55
Barrett, Eida	Civil Service Commission	"	218 38
Bartlam, Rose	Post Office	"	177 18
Belanger, C. E.	National Defence	"	484 85
Bosse, J. F. X.	Indian Affairs	"	382 29
Bourgault, M.	Agriculture	"	39 90
Bowers, A. A.	Secretary of State	"	9 00
Casey, L. M. G.	Post Office	Sister	949 16
Chapman, M. L.	National Revenue	Contributor	86 75
Chenier, J.	Archives	"	270 01
Clarke, Wm. McL.	Trade and Commerce	"	1,465 05
Coade, H. A.	Marine and Fisheries	Mother	857 70
Coté, J. N.	Marine and Fisheries	Contributor	502 72
Cottrell, Z. M.	Post Office	"	81 32
Courtenay, R. R.	Post Office	Daughter	643 77
Couture, C. H.	Trade and Commerce	Contributor	401 91
Cowie, I.	Marine and Fisheries	"	788 39
Cullen, M.	Public Works	"	32 66
Delisle, R.	Railways and Canals	"	916 45
Desjardins, L. E.	Pub. Ptg. and Sty	"	586 37
Deserres, G.	Post Office	"	920 36
Desormeaux, P. H.	Mines	"	388 88
Dionne, C.	Post Office	"	1,770 34
Dionne, M. J. H.	Post Office	"	240 13
Donaldson, M. D.	Agriculture	"	75 80
Dorval, L.	Post Office	"	584 85
Dryburgh, M. A.	Marine and Fisheries	"	949 50
Edward, H. B.	National Revenue	"	1,286 55
Elson, O. K.	Post Office	"	1,395 01
Elworthy, R. T.	Mines	"	1,477 50
Ferguson, Alex.	Railways and Canals	"	2,936 11
Fogarty, T. M. M.	National Revenue	"	70 17
Fontaine, E. C.	Interior	"	505 26
Fotheringham, M.	Post Office	"	114 49
Fournier, M. J.	Trade and Commerce	"	160 57
Galarneau, V.	National Defence	Father	502 61
Gavard, M. G.	Immigration and Colonization	Contributor	103 38
Gibson, E.	Post Office	"	1,209 96
Gilhooly, Lena	Post Office	"	396 57
Gillespie, R. A.	Post Office	"	987 06
Godbout, C.	Secretary of State	"	307 09
Gordon, M. A.	National Revenue	"	37 99
Grain, D. E.	Immigration and Colonization	"	113 56
Gray, Alex.	Public Works	"	1,613 14
Greer, E. M.	National Revenue	"	36 11
Guest, C. H.	Auditor General	"	1,544 54
Hacker, A. H.	Trade and Commerce	"	483 40
Hanright, E. B.	National Revenue	"	727 62
Hazelton, G. B.	Post Office	"	1,072 66
Hobart, S. W.	National Revenue	"	3,623 72
Hollington, P. L.	Railways and Canals	"	565 48
Horwitz, M.	Trade and Commerce	"	69 41
Hotchkiss, C. P.	Mines	"	1,234 36
Inglis, V. B.	Railways and Canals	"	1,468 71
Jackson, F. J.	Post Office	"	934 58
Johnston, C. F. W.	Agriculture	"	657 20
Kennedy, R. E.	Immigration and Colonization	"	515 20
Kynoch, Wm.	Interior	"	1,598 36
Laframboise, O.	Public Works	"	170 40
Lapointe, B.	Post Office	"	431 98
Laurin, M. H.	Post Office	"	152 91
Lavigne, J.	Archives	"	52 42
Lawe, R. A.	Interior	"	24 87
Lothian, D. E.	Immigration and Colonization	"	1,320 54
Mackay, J.	Marine and Fisheries	"	182 01
Martin, C. D.	National Revenue	"	2,149 94
Maunder, E. M.	S. C. R.	"	533 68
Métivier, E.	Post Office	"	1,348 22

Appendix No. 10—Continued

Withdrawal Allowances paid to Contributors or Dependents of Deceased Employees during the fiscal year ended March 31, 1928—*Concluded*

Name of Contributor	Department	To whom paid	Amount paid
			$ cts.
Morell, J. H.	National Defence	Contributor	1,231 97
Moyle, S. C.	S. C. R.	"	292 25
Murphy, C. U.	Mines	"	51 73
McConnell, C. A.	Indian Affairs	"	694 22
McKenzie, S. G.	Interior	"	125 00
McLeod, I. C.	Marine and Fisheries	"	315 19
McWhirter, H. C.	National Revenue	Brother	480 00
Oakley, H. M.	Public Works	Contributor	127 92
Otis, Alphee	Marine and Fisheries	"	385 80
O'Toole, Rosebud	National Revenue	"	86 00
Parkin, Chas.	Post Office	"	591 76
Pincombe, C. A.	National Revenue	"	561 48
Pugsley, F. C.	"	"	926 52
Rattey, M. E.	Trade and Commerce	"	106 00
Richards, T. B.	Railways and Canals	"	463 05
Rolston, E. G.	Post Office	"	831 71
Roughsedge, J. H.	Marine and Fisheries	"	161 30
Ruth, E. M.	Post Office	"	26 00
Scott, F.	Immigration and Colonization	"	382 11
Simon, E. G.	Public Works	"	493 80
Soulard, M. E. A.	Trade and Commerce	"	14 81
Stewart, Mary	Post Office	"	1,074 01
Switzer, H. S.	Agriculture	"	879 44
Thomas, C. T.	Marine and Fisheries	"	152 97
Thomas, E. A.	Public Works	"	1,014 30
Ward, M. R. E.	Mines	"	59 08
Widdifield, L. V.	S. C. R.	"	486 34
Wood, B. M.	Civil Service Commission	"	720 38
Wright, E. A.	Interior	"	90 90
			61,377 31

Total amount paid as Annuities to Contributors	$ 285,759 40
Total amount paid as Annuities to Dependents	100,375 75
Total amount paid as Gratuities	44,850 26
Total amount paid as Withdrawals	61,377 31
Total Superannuation Fund No. 5	$ 492,362 72

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Adams, Jessie L.	J. F. Adams	National Revenue	200 28	176 35
Aikens, Sarah	Wm. Aikens	Railways and Canals	72 66	69 97
Allen, Jennie	Horace Allen	Post Office	60 00	57 83
Anderson, Dorothea S.	Wm. P. Anderson	Marine and Fisheries	700 00	674 68
Anderson, Elizabeth	Andrew Anderson	Immigration and Colonization.	83 13	80 04
Archambault, Marie L.	Alfred Archambault	Archives	168 28	162 16
Ardouin, Clara	G. G. V. Ardouin	Labour	346 50	333 92
Arland, Mary Jane	Wm. Hy. Arland	Post Office	315 00	196 45
Armstrong, Dora	B. M. Armstrong	Post Office	720 22	634 10
Ashton, Lucy Ann	Alfred E. Ashton	Post Office	158 34	152 56
Atcheson, Ada	A. Atcheson	National Defence	173 25	166 87
Atkins, Martha J.	Wm. Atkins	National Revenue	333 68	321 55
Atwood, Julia	W. W. Atwood	National Revenue	140 00	134 86
Aumond, Leda P.	Telmond Aumond	Secretary of State	208 12	200 56
Aumond, Mary Eliz.	Wm. Hy. Aumond	National Defence	330 31	318 27
Austin, Clara	T. B. S. Austin	Post Office	120 00	115 66
Austin, Mary J.	Wm. A. Austin	Indian Affairs	126 00	121 45
Avery, Margaret	Wm. R. Avery	Post Office	262 50	252 96
Bacon, Ellen F.	Thos. Bacon	National Defence	126 00	121 45
Balcom, May Jane	J. H. Balcom	Finance	332 50	320 39
Barber, Charlotte V.	Edward C. Barber	Auditor General's Office	306 24	295 18
Barber, Elizabeth	Ben. F. Barber	Post Office	134 75	129 77
Barber, Jane E.	John S. Barber	National Revenue	225 48	217 33
Bare, Catherine	A. Bare	Railways and Canals	46 62	40 99
Barker, Annie L.	R. W. Barker	Post Office	455 00	438 49
Barnett, Laura	John Barnett	National Revenue	168 75	162 62
*Barnstead, Elizabeth	Edward H. Barnstead	National Revenue	60 00	7 35
Barrett, Annie	Jas. Barrett	Post Office	280 00	269 85
*Barrett, Lenore F.	D. A. Barrett	Post Office	362 64	160 16
Bartlett, Ida L.	J. H. Bartlett	Finance	156 00	150 36
Barton, Julia E.	W. H. Barton	National Revenue	46 46	44 76
Bartram, Janet	Jos. Thos. Bartram	National Revenue	245 00	236 07
Bascom, Elizabeth A.	Benj. Bascom	Post Office	132 00	127 23
Bate, Beatrice N.	Chas. W. C. Bate	Agriculture	500 72	482 56
Battle, Rachel Eliz.	John Battle	National Revenue	131 75	126 88
Bayard, Annie E.	Gilbert A. Bayard	National Revenue	266 73	257 01
Beatty, Margaret L.	W. J. Beatty	Post Office	375 88	362 26
Beauchesne, Caroline	P. C. Beauchesne	National Revenue	175 00	168 64
Beaudoin, Philomene	Jos. Beaudoin	Interior	70 58	68 01
Beaulieu, Rose Alba	Arthur H. Beaulieu	Printing and Stationery.	85 00	74 87
Beckwith, Cordelia R.	Robert Nelson Beckwith	National Revenue	217 50	209 58
Belair, Victoria L.	A. P. Belair	National Revenue	139 38	134 28
Belleau, Elise L.	Narcisse L. S. Belleau	National Revenue	69 79	67 16
Belliveau, Genevieve	A. H. Belliveau	Marine and Fisheries	301 60	290 67
Belton, Margaret K.	F. S. Belton	National Revenue	212 50	204 73
Belyea, Maria L.	Theodore H. Belyea	National Revenue	392 19	377 99
Bennett, Katherine E.	Fred G. Bennett	National Revenue	472 24	455 14
Bennett, Mary Alice	John Bennett	Finance	164 33	158 34
Bennetts, Minnie	Francis K. Bennetts	Privy Council	676 40	651 90
Bender, Eva Alma	Hiram Bender	National Revenue	112 98	108 84
Benson, Alice Maud	Martin Benson	Indian Affairs	438 96	390 58
Berney, Elizabeth	Thos. Berney	Post Office	204 14	196 74
Bickle, Charlotte H.	John W. Bickle	Interior	219 19	196 74
Bill, Margaret A.	Caleb R. Bill	National Revenue	101 85	98 08
Billings, Charlotte E.	Braddish Billings	Interior	55 00	48 39
Bilodeau, Rebecca	Edmond Bilodeau	Post Office	185 84	179 05
Blair, Rebecca	William Blair	Post Office	186 00	179 28
Blais, Elzire B.	J. C. Blais	Public Works	111 10	106 99
Blamey, Marion J.	George F. Blamey	National Revenue	179 63	173 03
Blanchard, Isabella M.	Wm. M. K. Blanchard	Post Office	86 25	83 04
*Blanchet, Mary A.	Ludger Blanchet	Post Office	261 04	235 43
Blethen, Clara Belle	Chas. W. Blethen	National Revenue	294 00	283 38

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
*Blizard, Amelia H.	F. W. Blizard	Post Office	158 40	110 09
Boivin, Josephine V.	Charles A. Boivin	National Revenue	160 00	154 18
Boneberg, Caroline D.	E. W. Boneberg	Railways and Canals	27 95	26 83
Bonnick, Sarah C.	Wm. Bonnick	Post Office	260 07	250 64
Botterell, Annie	Hy. A. Botterell	House of Commons	101 46	97 73
Botterell, Mary L.	Edward Botterell	House of Commons	420 00	404 83
Boulanger, Caroline	Arthur Boulanger	Public Works	40 38	38 56
Boulet, Blanche T.	Albert Boulet	Post Office	280 00	269 86
Bourinot, Isabelle	Sir John G. Bourinot	House of Commons	561 00	540 74
Bourret, Alexandrina	Hormidas A. Bourret	Post Office	262 50	252 96
Bourret, Sara D.	E. A. Bourret	National Revenue	175 00	168 64
Bown, Eliza P.	T. S. Bown	National Revenue	182 03	160 19
Boyle, Mary Agnes	Patrick Boyle	National Revenue	157 40	151 63
Bradley, Margaret	Casper W. Bradley	Railways and Canals	78 43	55 94
Brennan, Elizabeth	John Brennan	National Revenue	329 00	317 04
Brennan, Jessie	Thos. Brennan	Post Office	115 38	111 15
Brennan, Margaret F.	Pat. F. Brennan	Post Office	158 18	152 44
Brenot, Delphine	Honore Brenot	Post Office	222 28	214 21
Briggs, Johanna	John Briggs	Post Office	240 00	231 33
Brittain, Dora Joyce	Alfred Brittain	Post Office	56 00	53 90
Brittain, Ellen W.	Joseph Brittain	National Revenue	96 95	93 34
Brophy, Elizabeth M.	Geo. P. Brophy	Public Works	525 00	506 04
*Browne, Martha	David Browne	National Revenue	104 12	52 46
Browne, Sarah Alice	Alfred Browne	Post Office	210 00	202 41
Buist, Amelia E.	Andrew Buist	National Revenue	57 00	54 94
Bunel, Isabel E.	Edmond L. Bunel	Post Office	154 11	148 51
Bunting, Jane	Chas. E. Bunting	National Revenue	72 00	69 40
Burke, Bridget	Timothy Burke	National Revenue	365 25	351 87
Byers, Mary Agnes	Henry Byers	National Revenue	294 97	284 30
Byrnes, Honorah	John Byrnes	Trade and Commerce	509 62	491 12
*Byshe, Sarah Ann	F. R. Byshe	Indian Affairs	132 00	44 90
Cairns, Annie	Wm. Cairns	House of Commons	461 44	444 73
Cairns, Minnie Eliz.	Thos. A. Cairns	Post Office	437 50	421 60
Cameron, Lucy O.	Donald M. Cameron	National Revenue	280 00	269 85
Campbell, Constance	J. M. Campbell	Post Office	245 00	236 07
Campbell, Marie E.	John Campbell	Post Office	88 08	84 89
Campeau, M. Adeline	F. R. E. Campeau	National Revenue	503 61	485 33
Carleton, Isabella	John Carleton	Senate	280 00	269 85
Carleton, Julia	Robert Carleton	National Revenue	156 75	151 06
Carroll, Maria	Daniel Carroll	National Revenue	257 38	247 98
Carter, Amy J. T.	Chas. H. Carter	Railways and Canals	76 50	73 67
Carter, Bella Phebe	James Carter	Post Office	210 00	202 41
Casault, Esther A.	Louis J. Casault	Library of Parliament	210 00	202 41
Casgrain, Catherine	H. Casgrain	Agriculture	288 00	277 60
Cassells, Emma	Robert Cassells	Justice	352 00	339 25
Chadd, Ida	Geo. J. Chadd	National Revenue	22 00	
Chalmers, Elizabeth	Robert Chalmers	Mines	208 82	201 26
Chesley, Mary Stuart	H. N. P. Chesley	National Defence	490 00	472 26
Chilton, Jemima	J. P. Chilton	Post Office	186 92	180 09
Clappison, Mary	Thos. Clappison	National Revenue	280 00	269 85
Clark, Amelia E.	Jas. A. Clark	National Revenue	158 97	153 14
Clark, Bertha	Jas. S. Clark	Post Office	189 00	182 17
Clarke, Margaret M.	Patrick Clark	Post Office	90 00	86 75
Clarkin, Annie	John T. Clarkin	Post Office	105 22	101 32
Claude, Rachel A.	Benjamin Claude	Marine and Fisheries	70 00	67 43
Clayton, Clara M.	Frank Clayton	Interior	279 00	268 92
Clewes, Charlotte E.	John R. Clewes	Post Office	55 69	53 66
Clinch, Eleanor T.	C. Clinch	National Revenue	56 00	53 90
Coburn, Florence H.	Alex. H. J. Coburn	Post Office	238 00	229 36
Codd, Katherine F.	H. J. Codd	National Revenue	144 07	138 80
Code, Helen C.	Thos. J. Code	Trade and Commerce	748 86	721 76
Coffin, Jessie May	Frederick Coffin	Finance	344 14	331 61

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Coldwell, Emily Mary	Aubrey B. Coldwell	National Revenue	216 67	208 77
Colette, Rosalie	Jacques Colette	Railways and Canals	84 63	81 54
Collier, Ellen E	Chas. H. Collier	Railways and Canals	82 76	45 24
Colson, Elizabeth F	Frederick Colson	Secretary of State	586 25	565 08
Connolly, Margaret	Peter Connolly	House of Commons	280 00	94 87
Corbeil, Seraphine	Jos. Z. Corbeil	National Revenue	532 25	512 98
Corbett, Sarah G	Howard Corbett	National Revenue	32 50	23 13
Costley, Charlotte M	A. Costley	Post Office	425 00	409 58
Cote, Elmina	Pierre M. Cote	Justice	700 00	674 68
Cote, Julia	Jos. A. Cote	Interior	660 00	636 16
Courtney, Adelaide M	J. J. Courtney	National Revenue	210 12	202 53
Courtney, Mary E. S	J. M. Courtney	Finance	875 00	843 32
Cousins, Florence J	Hugh T. Cousins	Post Office	208 18	200 56
Crawford, Elizabeth	John Crawford	Post Office	252 00	242 90
Crawford, Isabella A	S. Crawford	National Revenue	239 95	231 21
Crocker, Victoria A	Wm. Crocker	Post Office	204 00	196 63
Culhane, Margaret	Patrick Culhane	National Revenue	97 50	93 92
Cullis, Ada Eliza	Wm. Cullis	Marine and Fisheries	51 75	49 85
Culross, Christina	Charles Culross	Post Office	88 98	63 47
*Cuthbertson, Isabella	Jas. R. Cuthbertson	Post Office	164 32	87 68
Dalton, Catherine J	James Dalton	House of Commons	490 00	472 26
Dalton, Margaret J	Robert G. Dalton	Indian Affairs	297 50	286 73
Daoust, M. E. L	Joseph A. Daoust	Trade and Commerce	264 83	255 16
D'Auray, Clarisse	Louis D'Auray	Agriculture	238 77	229 70
Daveluy, Marie Ann	Georges Daveluy	National Revenue	72 00	69 40
Davis, Alice M	John C. Davis	National Revenue	158 30	152 56
Davis, Flora B	Rupert G. Davis	Justice	232 00	223 58
Davis, Frances Julia	John Davis	Interior	490 00	431 43
Davison, Lucille D	Thos. E. Davison	Finance	202 67	195 24
Dawson, Maria	Francis Dawson	Railways and Canals	23 21	22 32
DeCelles, Marie E	A. D. DeCelles	Library of Parliament	943 06	908 90
Demare, Elva L	J. G. Demare	National Revenue	170 10	163 89
*Deuch, Katherine	Thos. Q. Deuch	National Revenue	130 00	114 42
Denneny, Jane	Jas. Denneny	Railways and Canals	116 90	112 65
D'Entrement, Frances	J. A. D'Entrement	National Revenue	48 00	46 26
Dickieson, Harriet	M. G. Dickieson	Finance	336 00	323 86
Dionne, Marie H	Ernest Dionne	Public Works	196 62	189 46
Dixon, Margaret M	Frederick A. Dixon	Railways and Canals	591 18	569 77
Dobbin, Margaret	W. L. Dobbin	National Revenue	257 54	248 22
Donaldson, Mary E	J. R. Donaldson	Post Office	257 40	248 10
Dorman, Jane H	W. H. Dorman	Post Office	280 00	269 85
Douglas, Emily	Peter B. Douglas	Interior	134 18	129 31
Doyle, Mary R	Jas. J. Doyle	Post Office	139 20	134 17
Doyon, F. M	J. A. Doyon	National Revenue	490 00	367 47
Driscoll, Sarah A	James Driscoll	Railways and Canals	28 25	27 18
Drouillard, Genevieve	Albert Drouillard	National Revenue	205 92	181 32
Drouin, Cedulie	Alphonse Drouin	Secretary of State	399 00	384 59
Dubé, Rose A	L. J. A. Dubé	Secretary of State	236 57	227 99
Dubé, Victoire	Lucien Dubé	House of Commons	350 00	337 28
Dufresne, Lucie L	F. A. Dufresne	Post Office	185 94	179 16
Dufresne, Mary A	L. F. Dufresne	Finance	159 45	153 60
Dumouchel, Clara	L. A. Dumouchel	National Revenue	247 14	238 15
Dunlop, Sarah	Jas. H. Dunlop	Library of Parliament	140 00	134 86
Dunne, Louise P	John P. Dunne	National Revenue	176 67	155 54
Dunnett, Charlotte E	E. H. Dunnett	Post Office	313 06	301 65
Dupont-Hebert, C.B	Chas. Dupont-Hebert	National Revenue	272 00	262 10
Edgar, Margaret	Wm. Edgar	Post Office	244 13	235 26
Egener, Louise I	A. Egener	National Revenue	262 50	252 96
Elliott, Margaret	James H. Elliott	Post Office	105 39	101 55
Ellis, Agnes	Geo. Ellis	Post Office	272 00	262 02
Ellis, Mary A. A	Wm. Ellis	Railways and Canals	246 50	237 57
Embury, Ida May	J. Embury	Post Office	51 13	18 60
Erwin, Rhoda	Walter Erwin	Marine and Fisheries	101 50	97 73

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Evans, Kate D	Albert H. Evans	Post Office	198 59	191 31
Fawcett, Myra	Edgar Fawcett	National Revenue	168 75	162 62
Fearnside, Ida J	J. H. Fearnside	Post Office	207 72	200 21
Ferguson, Ann E	Wm. Ferguson	Post Office	227 50	219 18
Fergusson, Melanie A	R. C. Fergusson	Post Office	256 63	247 29
Firth, Alicia	Charles M. Firth	Marine and Fisheries	61 63	36 40
Fletcher, Sarah	E. H. Fletcher	Post Office	693 88	668 78
Flinn, Margaret	Wm. Flinn	Post Office	156 51	150 82
Foley, Mary E	Jas. G. Foley	Privy Council	598 12	576 48
Forest, Rose D	Eugene Forest	National Revenue	301 20	290 32
*Fortesque, Emily	Lawrence Fortesque	R. C. M. P	875 00	67 18
Fortier, Cecile G	J. J. O. Fortier	National Revenue	132 59	127 69
Fortier, Sephronie	Theo. Fortier	Public Works	351 82	339 01
*Foster, Annie A	Hy. Foster	National Revenue	180 00	23 50
Foster, Blanche	Geo. L. Foster	Justice	252 00	241 90
Foster, Margaret	Alfred Foster	Railways and Canals	101 06	97 39
Fox, Mary A	Thomas Fox	National Revenue	262 13	252 61
Franck, Leda	Raphael Franck	Post Office	112 68	89 51
Fraser, Angeline	L. C. Fraser	Post Office	334 01	321 90
Fraser, Jennie	J. R. Fraser	Post Office	205 00	197 55
Fraser, Mary J	John Fraser	Auditor General	875 00	843 30
Frechette, Annie H	Achille Frechette	House of Commons	488 06	183 01
Frechette, Elizabeth	G. Frechette	Post Office	95 00	91 49
Freeman, Mary E	N. P. Freeman	National Revenue	157 50	151 75
Friers, Sarah A	John Friers	Post Office	191 33	184 39
Frigon, Leocadie P	H. M. A. Frigon	Post Office	163 30	157 30
Frost, Martha	S. L. T. Frost	National Revenue	412 77	397 77
Fulton, Mary	Robert Fulton	National Revenue	66 00	63 61
Gagnon, Emma	S. Gagnon	R. C. M. P	189 00	182 17
Gariepy, Marie A	J. B. Gariepy	Post Office	86 00	19 17
Garland, Katherine	N. S. Garland	Finance	266 47	256 78
Garrison, Elizabeth	W. A. Garrison	National Revenue	262 50	252 96
Gaudin, Agnes	J. Gaudin	Marine and Fisheries	185 55	178 82
Gaudry, A. L	B. T. Gaudry	Post Office	199 61	192 35
Gerald, Alice M	A. S. Gerald	National Revenue	105 00	101 20
Gerald, Elizabeth H	W. J. Gerald	National Revenue	875 00	843 32
Gerald, Lizzie	W. H. Gerald	National Revenue	374 00	360 41
Gill, Eliza A	Wm. Hy. Gill	Post Office	240 00	231 33
Gillie, Mary	John Gillie	Railways and Canals	88 59	85 36
Gingras, Marie P	J. F. Gingras	House of Commons	289 00	278 52
Giroux, Mary	O. J. Giroux	National Revenue	245 00	236 07
Giroux, Sophie	Joseph Giroux	Post Office	140 39	123 52
Gleeson, Anna	Jas. Gleeson	Railways and Canals	48 24	46 49
Godson, Mary M	Ernest Godson	Post Office	164 67	158 69
Goodeve, Chloe E	W. M. Goodeve	Interior	430 21	342 96
Gouin, Adelaide	Jas. A. Gouin	Post Office	700 00	674 68
Gouin, Erilie M	Chas. Gouin	National Revenue	210 00	202 41
Gould, Mary E	T. D. Gould	Post Office	217 00	191 04
Gourdeau, Clara	F. Gourdeau	Marine and Fisheries	700 00	674 68
Grafton, Mary	W. H. Grafton	National Revenue	224 00	215 83
Greaves, Marie Z	Walter Greaves	Post Office	366 26	353 01
Greenfield, Eliza	J. R. M. Greenfield	Post Office	593 18	571 74
Guerin, Aurore C	L. J. Guerin	National Revenue	198 84	191 65
Hagarty, Henrietta	H. B. Hagarty	National Revenue	270 60	260 82
Hagerman, Alvina V	J. G. Hagerman	National Revenue	186 94	180 09
Halkett, Isabel	J. B. Halkett	Marine and Fisheries	476 88	459 65
Hall, Beatrice	Chas. R. Hall	National Revenue	189 00	182 17
Hall, Elsie M	Jno. P. Hall	Post Office	271 01	261 17
Hamilton, Mary	Andrew Hamilton	Railways and Canals	122 40	117 98
Harding, Ida K	F. H. Harding	Marine and Fisheries	315 00	303 62
Harney, Mary	Thos. Harney	National Revenue	262 50	252 96
Harrington, Florence	W. H. Harrington	Post Office	616 88	594 52
Harris, Emma J	H. J. Harris	Post Office	33 20	31 92

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Harron, M. E.	R. J. Harron	Post Office	135 82	130 81
Hassard, Eva F.	Richard Hassard	Post Office	397 45	383 08
Haszard, Annie W.	T. W. D. Haszard	Post Office	245 00	236 07
Hatch, Caroline	Walter Hatch	Interior	94 88	91 37
Hayes, Emily C.	Edwin C. Hayes	Auditor General	472 50	455 37
*Hayter, Emily	Ben. Hayter	Indian Affairs	178 50	67 90
Heath, Christina	Daniel Heath	Railways and Canals	32 25	30 28
Henderson, Charlotte A.	James Henderson	Post Office	458 88	442 30
Henry, Jane	J. R. Henry	National Revenue	57 19	55 05
Herst, Dinah	Samuel Herst	Post Office	72 00	57 40
Hicks, Lessie A.	Amos Hicks	Post Office	396 67	382 27
Hill, Almina A.	Arthur M. Hill	National Revenue	173 33	167 02
Hilton, Frances P.	Geo. W. Hilton	Post Office	147 72	142 38
Hiscott, Frances S.	Wm. C. Hiscott	Post Office	282 66	248 84
Hobbs, Agnes	G. N. Hobbs	National Revenue	178 63	172 11
Holder, Lillie J.	Geo. W. Holder	House of Commons	175 00	168 64
Howe, Margaret C.	G. J. Howe	Railways and Canals	148 28	142 84
Hoyt, Rebecca A.	J. W. Hoyt	National Revenue	216 00	208 20
Hudson, Kate A.	A. B. Hudson	Auditor General	400 00	385 51
Hunt, Bessie	Geo. A. Hunt	Post Office	211 61	203 92
Hurley, Annie	Robert Hurley	Railways and Canals	103 34	99 58
Hyatt, Mary E.	F. F. Hyatt	Post Office	450 86	434 41
Hyslop, Henrietta I.	Sam. N. Hyslop	National Revenue	73 50	70 78
Ironside, Caroline	Geo. A. Ironside	National Revenue	194 25	187 14
James, Sophia	W. H. James	Post Office	69 00	66 50
Jarvis, Ethel C.	E. F. Jarvis	National Defence	758 33	730 89
Jenkins, Susan J.	Geo. Jenkins	National Revenue	141 63	124 68
Jessop, Mary S.	W. G. Jessop	Post Office	184 40	177 66
Johnson, Christina	Jos. Johnson	Post Office	315 00	303 62
Johnstone, Jane L.	Geo. E. Johnstone	National Revenue	143 52	126 37
Joule, Ellen	A. J. Joule	National Revenue	95 00	91 49
Keating, Laura M.	M. E. Keating	National Revenue	174 86	168 52
Keeler, Eliza A.	Geo. S. Keeler	National Revenue	144 14	138 91
Keith, Georgie	Jas. T. Keith	Post Office	315 00	303 62
Kelly, Margaret	Mathew D. Kelly	Marine and Fisheries	173 33	167 02
Kennedy, Maude A.	Robert D. Kennedy	National Revenue	315 00	303 62
Keyes, Helen	James Keyes	Railways and Canals	41 76	35 84
King, Augusta F.	Wm. F. King	Interior	666 11	641 95
Kinloch, Emily G.	Henry Kinloch	Interior	154 24	148 63
Klotz, Marie C.	Otto J. Klotz	Interior	865 97	834 65
Knauff, Henrietta	Henry Knauff	Post Office	179 61	173 03
Kreps, Rose Ann	Wm. H. Kreps	Post Office	280 00	269 85
Lacasse, Lioza M.	Louis T. Lacasse	Interior	110 00	105 95
Lafontaine, Eugenie	A. M. Lafontaine	National Defence	155 91	150 25
Laframboise, Alphonsine	L. J. M. Laframboise	House of Commons	560 97	540 62
Lagace, Melvina	Philippe Lagace	Post Office	84 00	51 25
Lally, Annie	P. J. Lally	Post Office	168 71	162 51
Lambe, Mabel M.	L. M. Lambe	Mines	594 13	572 66
Laporte, Clara L.	Geo. Laporte	National Revenue	204 00	196 63
Larochelle, Flora	Norbert Larochelle	Printing and Stationery	287 35	276 90
Larue, Marie E. C.	E. P. Larue	National Revenue	245 00	236 07
Latouche, Anna	A. Latouche	National Revenue	202 92	195 59
Laurin, Marie E.	A. Laurin	National Revenue	202 67	195 24
Lawlor, Elizabeth	R. A. Lawlor	National Revenue	105 00	101 20
Leblanc, Azilda	Pierre Leblanc	Railways and Canals	88 55	85 24
Lee, Frances A. R.	H. P. Lee	Post Office	174 66	168 29
Lee, Sarah Ann	Ed. Lee	National Revenue	251 81	242 66
Lefebvre, Alphonsine	G. Lefebvre	Post Office	255 21	245 90
Legendre, Letitia	J. B. Z. Legendre	Post Office	198 00	190 85
Leggett, Mary A.	John E. Leggett	Railways and Canals	140 00	134 86
Lelacheur, Sarah J.	C. P. Lelacheur	National Revenue	42 00	40 48
Lemieux, Emma E.	E. E. Lemieux	National Defence	502 67	484 41
Lemieux, J. A.	G. Lemieux	Interior	282 78	272 51

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Lepage, Alphonsine	Victor Lepage	Public Works	116 00	111 73
Leslie, Margaret	John Leslie	Justice	491 46	473 65
Lesueur, Lottie A	Chas. P. Lesueur	Post Office	437 50	29 39
Letson, Lucretia M	E. E. Letson	National Revenue	60 00	57 83
Levasseur, P. V	Naz. Levasseur	Interior	228 47	90 07
Lewis, Evelyn C	R. A. Lewis	Trade and Commerce	344 33	331 57
Lewis, Mary	J. H. Lewis	Post Office	513 62	495 05
Little, Christina M	H. R. Little	Post Office	129 50	120 44
Lord, Margaret	A. Lord	Marine and Fisheries	388 64	374 53
Losey, Susan	T. Losey	National Revenue	122 31	117 86
Loucks, Cecilia	H. H. Loucks	House of Commons	176 00	154 90
Lowe, Ella	W. H. Lowe	National Revenue	101 85	98 08
*Lowe, Flora	Geo. Lowe	Finance	427 29	343 02
Lowry, Sarah E. M	John Lowry	National Revenue	87 00	83 85
Loyer, Eglophire	F. Loyer	Interior	325 65	313 80
Lynch, Charlotte M	Walter Lynch	National Revenue	116 00	111 73
Lyons, Helen	Jno. M. Lyons	Railways and Canals	403 00	354 82
Macarow, Mary E	P. H. Macarow	Post Office	315 00	303 62
Macauley, Mary E	D. D. Macauley	Post Office	187 20	180 44
Macdonald, Annie	C. J. Macdonald	Post Office	312 00	300 73
Macdonald, Clara A	A. B. Macdonald	National Revenue	363 00	349 89
Macdonald, Isabella	Dugald Macdonald	National Revenue	225 00	216 87
Macdonell, Ada M	H. P. Macdonell	House of Commons	296 44	285 69
Macfarlane, Margaret	Thos. Macfarlane	National Revenue	315 00	303 62
Mackenzie, Grace A	Arch. Mackenzie	National Revenue	238 00	229 36
Macleod, Eliz. Susan	Alex. D. Macleod	National Revenue	140 19	135 09
Macpherson, Annie C	John Macpherson	National Defence	375 00	361 45
Macpherson, Ellen	Wm. Macpherson	Post Office	315 00	303 62
Macrae, Rachel A	Jas. A. Macrae	Indian Affairs	297 50	286 73
Madore, Marie H	J. A. Madore	Post Office	315 00	303 62
Mahon, Mary	Martin J. Mahon	Post Office	367 50	354 17
Maingy, Ann Maria	L. A. Maingy	Post Office	447 71	431 43
Malepart, Elizabeth	Geo. S. Malepart	Justice	525 48	506 50
Mankey, Mary W	Wm. J. Mankey	Post Office	146 56	141 22
Marentette, Susan	Alex. Marentette	Trade and Commerce	149 85	144 35
Marks, Emily E	John Marks	Finance	69 00	66 50
Marquette, Eliz. J	L. F. Marquette	Post Office	203 72	196 28
Martin, Antoinette	R. P. Martin	National Revenue	212 38	204 61
Martin, Nora E	C. W. Martin	Post Office	302 17	291 24
Martineau, Marie H	F. R. Martineau	Post Office	208 00	200 45
Matheson, Agnes	John Matheson	National Revenue	91 60	88 25
Matthews, Marie E	Geo. Matthews	Finance	126 04	121 45
Matthews, Sarah A	John Matthews	National Revenue	55 25	52 60
May, Christina	G. M. May	National Revenue	162 00	156 15
Medlow, Catherine	Charles Medlow	Secretary of State	95 00	91 49
Miller, Agnes B	Hy. J. Miller	Interior	70 00	61 60
Miller, Matilda	Robt. S. Miller	Post Office	247 48	238 50
Milligan, Lena P	W. G. Milligan	Post Office	458 03	441 38
Milliken, Bessie	Edwin Milliken	National Revenue	227 50	219 18
Moerschfelder, Jane	Jacob Moerschfelder	Post Office	415 92	400 90
Moffatt, Eliz. Ann	Thos. P. Moffatt	Indian Affairs	151 64	146 08
Monaghan, Minnie	John Monaghan	Post Office	168 00	161 93
Monkman, Eliz. E	A. H. Monkman	Post Office	116 73	112 42
Morin, Alice R	A. E. Morin	Post Office	288 17	277 71
Morin, Marie	Jules Morin	Marine and Fisheries	113 58	109 42
Murray, Flora	Alex. Murray	Post Office	222 22	214 09
McAdoo, Annie	R. J. McAdoo	National Revenue	153 92	148 28
McAllister, Mary	Daniel McAllister	National Revenue	68 00	59 14
McBeath, Lowell E	Allan McBeath	National Revenue	132 00	127 23
McCarthy, Mary L	Dennis F. McCarthy	Post Office	280 00	269 85
McCloskey, Bridget	J. R. McCloskey	National Revenue	198 01	190 85
McCord, Harline	F. A. McCord	House of Commons	416 25	401 13
McCoy, Anna C	Wm. McCoy	National Revenue	223 03	214 90

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
McDonald, Catherine	John McDonald	Justice	240 00	231 33
McDonald, Jessie A	Dan McDonald	National Revenue	*162 00	156 15
McDonald, Johanna	Jas. J. McDonald	National Revenue	46 56	44 87
McDonald, Mary C	J. F. McDonald	National Revenue	350 00	337 28
*McDougall, Marion E	John L. McDougall	Auditor General	540 00	115 50
McElhinney, E. F	M. P. McElhinney	Marine and Fisheries	247 72	238 73
McFarlane, Katherine	Jas. D. C. McFarlane	Post Office	149 44	144 00
McGee, Elizabeth	John Jos. McGee	Privy Council	560 00	539 70
McGie, Clara E	D. B. McGie	National Revenue	70 00	38 28
McGinnis, Jane A	Arthur McGinnis	National Revenue	236 41	227 86
McGirr, Jane	John McGirr	Indian Affairs	367 50	354 17
McGuire, Etna	Horace McGuire	Post Office	549 61	529 75
McInnis, Emma	J. L. McInnis	National Revenue	72 25	57 59
McIntyre, Lizzie	C. C. McIntyre	Finance	186 00	179 28
McKay, Annie E	Hiram McKay	Indian Affairs	471 43	454 33
McKay, Ellen	James McKay	National Revenue	118 71	114 39
McKay, Frances Jane	Samuel McKay	National Revenue	40 80	35 92
McKenna, C. A	W. G. McKenna	Post Office	63 00	60 72
McKenna, Mary	J. A. J. McKenna	Indian Affairs	390 00	375 91
McKenna, Mary S	W. J. McKenna	National Revenue	411 55	396 62
*McKenzie, Sarah E	C. J. McKenzie	National Revenue	456 92	421 92
McKiel, Mary O	C. E. McKiel	National Revenue	241 87	192 76
McLennan, E. A	A. McLennan	Post Office	189 00	182 17
McLeod, M. E	W. W. McLeod	Post Office	485 63	467 98
McMinn, Caroline	W. J. R. McMinn	Finance	112 00	107 91
McMullan, Dorothy	H. J. McMullan	Post Office	183 21	176 50
McNamara, Gertrude	M. McNamara	National Revenue	149 19	143 77
McQuarrie, Catherine	T. B. McQuarrie	National Revenue	12 31	11 79
Nelson, Ermina	Frank Nelson	Interior	504 00	485 80
Nelson, Jessie	Robert Nelson	Post Office	232 30	223 81
Nevens, Alice M	J. Jas. Nevens	Post Office	131 44	126 65
Newall, Mary E	W. J. Newall	Post Office	60 00	57 83
Newsome, Charlotte	W. A. Newsome	Railways and Canals	145 83	140 53
Nicholson, Georgina	James Nicholson	Post Office	114 56	100 80
Noble, Margaret	W. H. Noble	Marine and Fisheries	183 85	177 20
Norcross, Mary L	A. A. Norcross	Post Office	377 40	332 32
Norris, Gertrude	Jas. G. Norris	Post Office	315 00	303 62
Northrop, Marilla	B. M. Northrop	Post Office	703 94	678 50
Nutting, Claire	Jas. P. Nutting	Trade and Commerce	236 13	227 51
O'Brien, Harriet	J. F. O'Brien	National Revenue	380 69	366 89
Odell, Elizabeth L	Henry Odell	National Revenue	78 90	75 92
O'Dowd, M. A	Francis O'Dowd	Post Office	238 00	227 86
O'Farrell, Margaret	Robert O'Farrell	National Revenue	66 00	63 61
O'Flaherty, M. A	E. J. O'Flaherty	National Revenue	80 59	77 61
O'Leary, Johanna	B. O'Leary	Railways and Canals	49 67	39 51
O'Loane, Teresa E	J. T. O'Loane	Post Office	270 67	260 82
Orr, Lizzie L	W. A. Orr	Indian Affairs	585 76	564 56
Ouellette, Marie L	E. H. Ouellette	Post Office	245 00	236 07
Owen, Keziah	A. W. Owen	Marine and Fisheries	349 42	336 70
Panet, Euphemie E	Chas. Panet	House of Commons	174 65	168 29
Paquet, Marie E	E. T. Paquet	Post Office	404 67	390 02
Park, Edith	W. A. Park	National Revenue	294 00	283 38
Parker, Winnifred	Wm. Parker	Post Office	210 00	202 41
Parkhill, Ida L	W. J. Parkhill	National Revenue	164 14	158 11
Patrick, Mary	G. M. Patrick	Post Office	110 82	106 76
Patteson, Marie	T. C. Patteson	Post Office	580 00	559 01
Pelletier, Josephine	M. Pelletier	Post Office	190 72	183 79
Pereira, Lizzie	L. C. Pereira	Interior	490 00	472 26
Perry, Sarah	H. C. Perry	National Revenue	21 00	20 24
Phair, Maud	W. B. Phair	Post Office	198 00	190 85
Philibert, Emma	J. E. Philibert	Post Office	232 00	223 25
Phillips, Mabel	R. B. H. Phillips	Post Office	273 79	263 83
Phillips, Maria	W. R. Phillips	Public Works	88 38	77 77

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Continued*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Continued*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Pirrie, Lillian	T. A. Pirrie	Post Office	76 32	60 84
Plumb, Josephine	Chas. Plumb	Post Office	494 28	476 43
Plummer, G. M.	H. Plummer	National Revenue	390 51	376 37
Plunkett, Ada	G. L. Plunkett	Post Office	367 50	354 17
Plunkett, Mary	Wm. Plunkett	National Revenue	225 75	217 56
Polkinghorne, Margaret	J. A. Polkinghorne	House of Commons	283 50	273 20
Pope, Ethelwyn	Geo. D. Pope	Interior	695 25	295 25
Pothier, Jean	D. L. Pothier	National Revenue	19 00	16 69
Powell, Catherine	John Powell	Post Office	89 27	78 51
Price, Angeline	Geo. Price	National Revenue	82 93	79 92
Prout, Mary	Frank Prout	National Revenue	32 50	31 23
Quain, Ellen	Redmond Quain	National Revenue	411 48	362 33
Quesnel, Sophie	Jules Quesnel	Railways and Canals	132 00	127 23
Quinlan, Julia	M. Quinlan	Post Office	175 00	168 64
Quinn, Catherine	J. D. Quinn	National Revenue	280 00	269 85
Ranahan, Mary	Peter Ranahan	Marine and Fisheries	77 00	42 09
Rand, Mary H	F. C. Rand	National Revenue	214 12	206 34
Reinhardt, Margaret	H. N. Reinhardt	National Revenue	104 82	100 97
Renaud, Mathilde	Jos. E. Renaud	Post Office	256 67	247 29
Rennie, Helen B	Geo. Rennie	National Revenue	350 00	337 28
Reynolds, Elizabeth	W. G. S. Reynolds	Privy Council	32 50	31 23
Riddell, Annie	R. W. Riddell	Post Office	289 50	278 98
Rigby, Martha	G. R. Rigby	National Revenue	63 00	60 72
Robertson, Annie	Alex. Robertson	Trade and Commerce	70 50	67 89
Robertson, Catherine	J. N. Robertson	Post Office	87 81	62 62
Robidoux, Ellen	N. Robidoux	House of Commons	499 63	481 52
Robinson, Sophie	Geo. Robinson	National Revenue	72 50	69 86
Rogers, Susannah	C. C. Rogers	Interior	224 00	215 83
Rondeau, Aglae	U. Rondeau	Post Office	315 00	303 62
Rooney, Mary	Jno. Rooney	Post Office	125 62	120 98
Roper, Ella M	S. C. D. Roper	National Revenue	176 00	169 56
Rorison, Elizabeth	B. D. D. Rorison	Post Office	168 00	147 93
Ross, Ada	Alex. Ross	National Revenue	244 72	235 84
Ross, Bella J	C. W. Ross	Railways and Canals	392 00	377 76
Ross, Rebecca	Geo. Ross	Post Office	965 42	930 53
*Ross, Sarah	J. D. Ross	Post Office	223 35	65 16
Rouleau, Josephine	F. Rouleau	House of Commons	210 00	202 41
Rourke, Elizabeth	J. E. Rourke	Finance	700 75	674 65
Rousseau, Caroline	H. B. Rousseau	Post Office	189 00	182 17
Roy, Elizabeth	Alex. Roy	National Revenue	28 00	26 95
Roy, Fabiola	E. F. E. Roy	Public Works	189 00	180 67
Sandall, Mary A	H. P. Sandall	National Revenue	266 70	257 01
Scholfield, Mary C	Thos. Scholfield	National Revenue	93 54	90 10
Scholfield, Sarah	Fergus Scholfield	Marine and Fisheries	61 25	58 99
Schreiber, Julia	Sir C. Schreiber	Privy Council	1,050 00	1,012 08
Scott, Elizabeth	Andrew Scott	National Revenue	280 00	238 56
Shanacy, Jane F	Michael Shanacy	National Revenue	208 00	200 45
Shaw, Elizabeth	Abraham Shaw	National Revenue	555 33	535 18
Shaw, Louisa	Jas. F. Shaw	National Revenue	590 62	569 19
Simpson, Jenny	J. B. Simpson	Auditor General	315 00	303 62
Slattery, Elizabeth	Ralph Slattery	National Revenue	171 92	165 63
Slean, Eliza	John Slean	National Revenue	104 14	100 28
Sloan, Cassie E	M. W. Sloan	Post Office	210 00	202 41
Smith, Agnes	Geo. Smith	National Revenue	155 90	150 25
Smith, Agnes B	E. J. M. Smith	Public Works	428 46	412 93
Smith, Emily A	Sidney Smith	Post Office	698 76	673 52
Smith, Jennie F	Fred W. Smith	Indian Affairs	266 51	256 78
Soutter, Eliza	Alex. Soutter	Senate	367 50	245 88
Spereman, Annie	J. J. Spereman	National Revenue	248 00	218 30
Standish, Dorothy	J. G. Standish	National Revenue	339 56	327 22
*Stanley, Rachel	T. R. Stanley	Post Office	272 43	161 92
Stanton, Sabina	E. P. Stanton	Post Office	536 29	516 91

Appendix No. 10—Continued

Civil Servants Widows Annuities Act, 1927—*Concluded*

Amounts paid to widows of deceased contributors to Superannuation under part I of the Superannuation and Retirement Act—*Concluded*

Widow	Contributor	Department	Annual Allowance	Amount paid during 1927-28
				$ cts.
Stayner, Jessie	T. A. Stayner	National Revenue	51 00	
Steckel, Mary	L. J. Steckel	Public Works	538 86	519 34
Steele, Mathilda	V. H. Steele	Marine and Fisheries	396 00	381 70
Steers, Annie	C. J. Steers	Interior	490 00	472 26
Steffens, Margaret	John Steffens	Railways and Canals	71 42	68 82
Stevens, Alicia	C. F. Stevens	National Revenue	133 00	128 15
Stewart, Alma	Douglas Stewart	Justice	698 54	673 29
*Stewart, Geraldine	J. C. Stewart	Post Office	496 47	467 83
Stewart, Isabel	E. N. S. Stewart	National Revenue	123 75	98 63
Stewart, Isabelle	Sam. Stewart	Indian Affairs	490 00	472 26
Stimpson, Kate	F. C. Stimpson	National Revenue	341 00	328 60
Stinson, Susan	Thomas Stinson	National Revenue	129 31	124 57
Stoddart, Helen	Jas. Stoddart	Post Office	198 27	191 08
Stratton, Rose	W. C. Stratton	National Revenue	517 05	498 29
Strongman, Mary	Wm. Strongman	Post Office	144 94	139 60
Strous, Ida	Jas. Strous	Post Office	145 55	140 18
Sutherland, Kate	E. D. Sutherland	Auditor General	1,050 00	1,012 08
Swan, Hannah	W. H. Swan	Post Office	231 00	222 65
Swinburn, Maria	A. R. Swinburn	Interior	218 32	210 39
Taylor, Elizabeth	Charles Taylor	National Revenue	78 00	75 18
Theriault, Rose	J. A. Theriault	Public Works	215 42	207 62
Thompson, Elizabeth	James Thompson	Post Office	197 64	190 50
Thompson, Irene	H. P. Thompson	Post Office	273 00	263 14
Thompson, Theresa	Robt. Thompson	Post Office	312 81	301 42
Toller, Annie F	Fred Toller	Finance	558 54	538 31
Trainor, Ellen	B. Trainor	Post Office	210 00	202 41
Travis, Minnie	L. W. Travis	Post Office	108 00	104 10
Trudel, Louise	J. B. Trudel	Senate	276 50	243 45
Tyson, Elizabeth	A. M. Tyson	National Revenue	91 95	88 60
Vankoughnet, Lucy	L. Vankoughnet	Indian Affairs	528 00	508 93
Vavasour, Isobel	E. W. Vavasour	Post Office	245 00	236 07
Verner, Helene	J. W. D. Verner	Agriculture	280 00	269 85
Verreault, Exilia	J. E. Verreault	Public Works	37 50	36 08
Verret, Annie	G. C. Verret	Public Works	44 64	43 02
Waller, Annie	John Waller	National Revenue	56 31	54 24
Walsh, Helen	W. J. Walsh	Patent and Copyright	273 67	263 72
Warwicker, Lydia	F. S. Warwicker	Post Office	181 84	146 95
Waterman, Anne	W. L. Waterman	Post Office	288 96	278 52
Weyms, Eva	Chas. Weyms	National Revenue	189 44	182 52
White, Adeline	E. White	National Revenue	146 21	140 88
White, Clara	F. White	R.C.M.P.	875 00	843 32
White, Mary	C. W. White	Marine and Fisheries	140 99	135 79
Whittaker, Mary	W. C. Whittaker	Finance	437 50	421 60
Wilkes, Margaret	E. T. Wilkes	National Revenue	171 84	165 63
Willimott, Susan	C. W. Willimott	Interior	264 69	255 04
Williston, Kate	W. W. Williston	Marine and Fisheries	43 50	34 63
Wilmot, Mary	J. B. Wilmot	Trade and Commerce	144 00	138 80
Wilson, Annie	David Wilson	National Revenue	207 61	200 10
Wiltshire, Margaret	John Wiltshire	Printing and Stationery	203 01	195 59
Winters, Melissa	Wm. Winters	Railways and Canals	33 52	29 48
Wood, Emily	F. F. Wood	National Revenue	63 00	60 72
Worsnop, Mary	A. A. Worsnop	National Revenue	485 62	467 98
Wright, Harriet	J. P. Wright	Railways and Canals	200 00	192 70
York Jennie	Dunbar York	Post Office	210 00	202 41
				130,946 33

Appendix No. 10—Concluded

SUMMARY

—	Payments on account of employees retired prior to March 31, 1927	Payments on account of employees retired during fiscal year ended March 31, 1928	Total payments during fiscal year
	$ cts.	$ cts.	$ cts.
Superannuation No. 1, Revised Statutes, 1906, Chap. 17.....	619,230 96	5,773 86	625,004 82
Superannuation No. 2, Revised Statutes, 1906, Chap. 17.....	38,850 29	3,013 71	41,864 00
Superannuation No. 3, Printing Bureau.....	19,038 32	.....	19,038 32
Superannuation No. 4, Public Service Retirement Act.....	723,825 34	.....	723,825 34
Superannuation No. 5, Civil Service Superannuation Act, 1924	293,360 95	199,001 77	492,362 72
Superannuation No. 6, Civil Servants Widows Annuities Act, 1927.....	.....	130,946 33	130,946 33
Total superannuation payments.....	1,694,305 86	338,735 67	2,033,041 53

Appendix No. 11

PUBLIC WORKS—CHARGEABLE TO INCOME

—	$ cts.	$ cts.	$ cts.
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.			
PUBLIC BUILDINGS			
Nova Scotia—			
Digby—Public Building—General repairs and improvements	1,200 00		
Halifax Immigration Building—Payment to Department of Railways and Canals for accommodation	25,000 00		
Halifax Quarantine Station—Repairs and improvements	5,260 15		
Halifax—Repairs to buildings and wharfs at R.C.N. Barracks and H.M.C. Dockyard	30,000 00		
Halifax—Rockhead Hospital—Repairs and improvements	1,998 06		
Inverness—Public Building—Repairs and improvements	4,268 40		
		67,726 61	
Prince Edward Island—			
Charlottetown—Old Bank Building—Repairs and improvements	1,853 00		
Charlottetown—Public Building—Repairs and improvements	1,626 00		
Kensington—Public Building	11,999 59		
Summerside—Public Building—Repairs and improvements	3,150 00		
		18,628 59	
New Brunswick—			
Chatham—Public Building—Repairs and improvements	1,993 00		
Edmundston—Public Building	2,102 54		
St. John—Custom House—Improvements and repairs	14,848 89		
St. John—New Post Office Building—Repairs and improvements	4,400 00		
St. John—Old Post Office Building—Restoration and repairs	868 54		
		24,212 97	
Maritime Provinces Generally—			
Dominion Public Buildings—Improvements, repairs etc.		42,997 31	
Quebec—			
Baie St. Paul—Public Building	14,639 46		
Chicoutimi—Public Building—Addition	23,487 53		
Dominion Public Buildings—Improvements, repairs, etc.	101,985 17		
Drummondville Public Building—Addition	13,000 00		
Grosse Isle Quarantine Station—Shelter shed	16,130 58		
Kenogami—Public Building	26,021 23		
Limoilou—Public Building	40,951 52		
Mont Laurier—Public Building	18,185 19		
Montreal General Post Office—Reorganization	20,689 80		
Montreal General Post Office—Alterations and repairs to heating and building	14,985 63		
Montreal—Old Examining Warehouse—Restoration (Governor General's Warrant of August 4, 1927)	82,162 50		
Montreal Public Buildings—Installation of Motor Generator Sets	11,059 13		
Montreal—Ordnance Stores Building	21,377 00		
Montreal—Postal Station in Outremont Division	20,507 23		
Montreal—Towards purchase of Lavut Building for Postal Station "G"	12,450 33		
Montreal—Tractors for Railway stations	4,992 40		
Quebec Citadel-Governor General's quarters-Additions, alterations and improvements	99,988 54		
Quebec—Savard Park Hospital—Repairs and alterations	4,990 73		
St. Jacques L'Achigan—Public Building	20,993 47		
St. Jerome—Public Building-Repairs and improvements	1,984 37		
Ste. Therese—Public Building—Repairs and Improvements	600 00		
Thetford Mines—Public Building—Fittings and alterations	1,059 50		
Waterloo—Public Building	7,804 51		
Westmount—Armoury	12,830 40		
		592,876 22	
Carried forward		746,441 70	

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts
Brought forward		746,441 70	
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
PUBLIC BUILDINGS—*Continued*			
Ontario—			
Dominion Public Buildings—Improvements, repairs, etc.	114,933 66		
Durham—Public Building	20,000 00		
Glencoe—Public Building—Tower Clock	1,700 00		
Haileybury—Armoury	8,947 46		
Hamilton—Public Building—Alterations and repairs	3,667 00		
Kenora—Public Building—Addition	15,994 51		
Kitchener—Public Building—Addition	1,510 21		
Napanee—Public Building—Improvements and alterations	3,694 17		
Ottawa Departmental Buildings—Fittings, etc	55,110 33		
Ottawa Dominion Observatory—Clock Vault	4,113 71		
Ottawa—Government's share of cost of local improvement charges for widening and paving roadway on Wellington Street between Connaught Place and Bank Street	43,433 33		
Ottawa—Laboratory for Department of Mines at Booth Street Experimental Station	42,473 41		
Ottawa—Parliament Hill—Sidewalks	9,670 98		
Ottawa—Public Buildings—Paving roadways	31,000 00		
Ottawa—Towards purchase of building for Government workshops	13,305 00		
Ottawa—Towards purchase of Daly Building	124,000 00		
Ottawa—Rideau Hall—Alterations, improvements, and furnishings	49,993 57		
Ottawa—Post Office Block—Government's share of cost of local improvements	786 60		
Ottawa—Sussex Street property—Government's share of cost of local improvements	2,775 75		
Port Colborne—Exchequer Court Award	10,940 18		
Port Colborne—Public Building	3,849 33		
Rockland—Public Building	21,841 79		
Toronto—Postal Station "A"—Mechanical equipment	72,727 90		
Toronto—Postal Station "K"—Government's share of cost of local improvements	2,472 20		
Walkerville—Public Building—Government's share of cost of local improvements	1,463 84		
Wiarton—Public Building	707 40		
		661,112 33	
Manitoba—			
Dominion Public Buildings—Improvements, repairs, etc.	29,373 44		
Transcona—Site for public building	24 32		
Winnipeg—Fort Osborne Barracks—New boilers	46,817 77		
Winnipeg—Grain Inspection Building	10,835 00		
Winnipeg—Minto Street Armoury—Fittings	14,992 17		
		102,042 70	
Saskatchewan—			
Dominion Public Buildings—Improvements, repairs, etc.	16,991 70		
Indian Head—Forest Nursery Station—Improvements and repairs	4,394 00		
Moose Jaw—Public Building—Improvements and repairs	3,250 29		
North Battleford—Public Building—Alterations and improvements	5,299 43		
Prince Albert Public Building—Alterations	7,789 75		
Saskatoon—Public Building—Improvements and repairs	4,500 00		
Sutherland—Forest Nursery Station—Repairs, painting, etc	3,568 00		
		45,793 17	
Alberta—			
Dominion Public Buildings—Improvements, repairs, etc.		14,129 08	
Carried forward		1,569,518 98	

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	.....	1,569,518 98	
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued.*			
PUBLIC BUILDINGS—*Continued*			
British Columbia—			
Bentinck Island Lazaretto—New buildings	2,676 21		
Dominion Public Buildings—Improvements, repairs, etc.	31,464 37		
Esquimalt—To replace buildings and equipment destroyed by fire	72,096 96		
Esquimalt—General repairs and improvements to R.C.N. Barracks and H.M.C. Dockyards	16,638 80		
Kimberley—Public Building	5,500 00		
Revelstoke—Public Building	2,051 00		
Vancouver—Public Building—Improvements	53,000 07		
Vancouver—Public Building—One year's interest at 5% on mortgage of $400,000	20,000 00		
Vancouver—Public Building—Government's share of cost of local improvements	2,111 50		
Victoria—Astrophysical Observatory—(Little Saanich Mountain)—Repairs and improvements to roadway	4,250 00		
William Head Quarantine Station—Repairs and improvements	8,207 93		
William Head Quarantine Station—Office Building for Customs and Quarantine purposes	10,020 46		
		228,017 30	
Generally—			
Experimental Farms—New buildings	49,979 36		
Experimental Farms—Replacements, repairs, improvements, etc	90,152 68		
Flags for Dominion Public Buildings	2,569 52		
Installation of fuel saving devices	10,032 45		
Military Buildings—Repairs, fittings, alterations and additions	39,965 84		
Military Hospitals—Repairs and improvements	77,190 71		
Public Buildings—Generally	34,156 58		
Purchase of stamp cancelling machines	484 86		
		304,532 00	
RENTS, REPAIRS, FURNITURE, HEATING, ETC.			
Ottawa Public Buildings and Grounds—			
Dominion Observatory and Geodetic Survey Building—Repairs, improvements, maintenance of grounds, etc	3,999 44		
Water	42,474 73		
Elevator Attendants	96,899 06		
Lighting, including roads and bridges	94,498 02		
Heating, including salaries of engineers, firemen and watchmen	377,968 96		
Departments Generally—Char service, including $100 to E. Snowdon for firing the noon gun	369,941 34		
Repairs, improvements, additions and maintenance	649,970 55		
Rideau Hall (including grounds)—Improvements, furniture, maintenance, etc	61,895 91		
Rideau Hall—Allowance for fuel and light	19,000 00		
Telephone service	99,978 97		
		1,816,626 98	
Dominion Public Buildings—			
Dominion Immigration Buildings—Repairs, improvements, additions, furniture, etc	24,298 08		
Dominion Quarantine Stations—Maintenance	9,108 97		
Fittings, general supplies and furniture	124,217 49		
Heating	376,348 02		
Lighting	217,316 37		
Power for running elevators, stamp cancelling machines, etc	79,864 38		
Carried forward	831,153 31	3,918,695 26	

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward	831,153 31	3,918,695 26	
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
PUBLIC BUILDINGS—*Concluded*			
RENTS, REPAIRS, FURNITURE, HEATING, ETC.—*Con*			
Dominion Public Buildings—Concluded.			
Rents	1,439,889 75		
Salaries of caretakers, engineers, firemen, etc	1,019,854 40		
Supplies for caretakers, engineers, firemen, etc	44,555 32		
Water	71,934 95		
Yukon Public Buildings—Rents, repairs, fuel, light, water service and caretakers' salaries	27,941 30		
Victoria, B.C.—Astrophysical Observatory (Little Saanich Mountain)—Maintenance, repairs and improvements	1,358 35	3,436,687 38	
Total Public Buildings	.....	.....	7,355,382 64
HARBOURS AND RIVERS			
Nova Scotia—			
Amherst Point—Repairs to dyke	1,849 82		
Arichat—Wharf repairs	2,599 89		
Barrington Passage—Wharf extension and repairs	3,499 59		
Barrios Beach—Tracadie—Breakwater	2,835 91		
Basswood Beach—Extension to beach protection	2,599 11		
Bayfield—Breakwater repairs	396 29		
Bayfield—Wharf repairs	2,498 71		
Blanche—Extension to breakwater wharf	2,827 76		
Black Point—Breakwater repairs	2,493 35		
Blandford—Breakwater repairs	4,398 40		
Bluff Head—Breakwater	5,001 88		
Brooklyn—Wharf repairs	1,850 00		
Burke's Head—Wharf repairs	1,497 94		
Cape Negro Island—Breakwater	8,894 43		
Cariboo Island—Breakwater repairs	988 63		
Castle Bay—Wharf repairs	1,500 05		
Chegoggin Point—Breakwater	6,499 73		
Chezzetcook (Murphy's or Myatt's)—Repairs to wharf and road	1,000 02		
Comeau's Hill—Breakwater extension	4,896 80		
Cooke's Cove—Wharf	2,961 61		
Cow Bay (Port Morien)—Breakwater repairs	1,499 96		
Devil's Island—Breakwater repairs and improvements	1,098 07		
Digby—Repairs and renewals to pier	3,991 11		
Digby—Wharf improvements	2,490 90		
Dingwall (Aspy Bay)—Breakwater	27,119 50		
Fall's Point (Woods Harbour)—Wharf extension	7,935 97		
Feltzen South—Breakwater repairs	7,401 44		
Feltzen South—Wharf repairs	1,290 48		
Fourchu—Rebuilding protection work	1,042 71		
Grand Desert—Beach protection	1,300 45		
Grand Etang—Repairs to piers and bridge	1,896 89		
Grass Cove—Breakwater wharf	7,374 10		
Hall's Harbour—Breakwater repairs and improvements	1,448 61		
Harbours and Rivers Generally—Repairs and improvements	63,786 96		
Herring Cove—Breakwater repairs	1,592 04		
Hunt's Point—Breakwater repairs	1,699 27		
Inverness—Repairs to Harbour works	3,989 68		
Jersey Cove—Wharf	2,798 50		
King's Bay—Breakwater	8,907 05		
La Have River—Dredging	35,000 00		
Larry's River—Breakwater repairs	2,529 85		
Lawlors Island—Wharf repairs	999 44		
Litchfield—Extension of groyne	1,799 81		
Carried forward	250,082 71	.....	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	250,082 71		7,355,382 64
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*			
Nova Scotia—Concluded			
Little Anse—Breakwater repairs	1,399 79		
Little Judique Ponds—Wharf—Repairs to approach	1,011 80		
Little River Harbour—Wharf extension	1,424 60		
Lower East Pubnico—To purchase and reconstruct wharf	5,166 25		
Lower L'Ardoise—Breakwater repairs	2,401 52		
Lower West Ship Harbour—Wharf repairs	2,179 46		
Lunenburg—Dredging	9,510 45		
Main à Dieu—Wharf	1,143 47		
Malagash—In full and final settlement of the claim of the Fraser Paving and Construction Co., Ltd., in connection with their contract for dredging	2,930 69		
Malagash—Wharf repairs	1,898 45		
Margaree Harbour—Repairs to harbour works and extension to beach protection	5,592 65		
Meteghan—Wharf extension	6,500 00		
Mill Creek—Flume	3,388 77		
Murphy's Pond, Port Hood—Harbour improvements	10,505 61		
Musquodoboit—Wharf repairs	1,598 50		
Necum Teuch—Wharf repairs	3,488 72		
New Campbellton—Wharf repairs	1,392 45		
Newellton—Wharf repairs	3,269 62		
New Harbour (Antigonish—Guysborough Co.)—Breakwater repairs and extension	5,342 91		
Newport Landing—Wharf extension	2,798 15		
Noël—Wharf repairs	2,999 22		
North East Harbour—Wharf repairs	76 87		
North West Harbour—To purchase and reconstruct wharf	3,308 72		
Parkers Cove—Breakwater repairs	888 20		
Parrsboro—To repair and extend protection work	3,249 95		
Petite Riviere—Breakwater reconstruction and repairs	4,681 68		
Pictou Island—Wharf repairs	3,635 79		
Port Joli—Wharf repairs	999 55		
Port George—Breakwater repairs	1,497 48		
Port Wade—Repairs to pier	10,172 77		
Port Williams—Wharf	13,530 25		
Salmon River—Repairs to channel protection work	3,045 77		
Scott's Bay—Rebuilding part of south breakwater	7,762 47		
Seal Island—Breakwater extension	3,542 46		
Shag Harbour—Wharf repairs	1,221 00		
Sheet Harbour—Dredging	20,316 28		
Short Beach—Extension of pier	6,148 63		
Skinner's Cove—Repairs to pier	999 01		
South Side (Donald's Head) Breakwater repairs	2,907 71		
Spencers Island—Wharf repairs	1,999 98		
Stoney Island—Repairs to breakwater-wharf	2,500 26		
Summerville—Wharf repairs	2,485 54		
Sydney—Wharf	18,105 59		
Tatamagouche—Wharf repairs	847 63		
Tenecape—Breakwater extension	4,500 00		
Trout Cove—Breakwater repairs	11,483 47		
West Pubnico (Ledge Harbour)—Breakwater	7,629 83		
Wine Harbour—Breakwater	2,590 30		
Yarmouth—Dredging	50,000 00		
		516,152 98	
Prince Edward Island—			
Belfast—Wharf repairs	2,672 74		
Charlottetown—Reconstruction of railway wharf	512 61		
Egmont Bay—Wharf	3,958 16		
Georgetown—Freight shed and improvements to wharf	54,642 42		
Harbours and Rivers Generally—Repairs and improvements	8,105 31		
Carried forward	69,891 24	516,152 98	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

	$ cts.	$ cts.	$ cts.
Brought forward	69,891 24	516,152 98	7,355,382 64
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Continued*			
HARBOURS AND RIVERS—*Continued*—			
Prince Edward Island—Concluded—			
Jude's Point—Wharf extension and dredging	1,362 63		
Miminigash Harbour—Breakwater reconstruction	5,691 07		
Naufrage Harbour—Repairs to breakwaters and bridge	662 94		
New London—Harbour improvements	9,791 99		
Pinette—Wharf repairs	1,490 22		
Rustico Harbour—Breakwater repairs	106 35		
Southport—Wharf repairs	1,487 36		
Stanley Bridge—To purchase wharf	4,042 05		
Summerside—Wharf repairs and improvements	58,497 49		
Tignish—Repairs to harbour works	5,362 07		
West Point—Wharf repairs	6,800 00		
		165,185 41	
New Brunswick—			
Bay du Vin—Wharf repairs	4,146 36		
Blue Cove—Breakwater	1,337 84		
Buctouche—Wharf repairs	1,202 18		
Burn's (Belle Isle Bay)—Wharf improvements	770 17		
Burton—Wharf repairs	714 78		
Burton Court House—Wharf repairs	1,187 34		
Cape Bald—Breakwater repairs	4,999 86		
Caraquet Church—Wharf	7,997 00		
Cocagne—Wharf repairs	2,000 00		
Escuminac—Breakwater extension	393 79		
Grand Harbour (Ingall's Head)—Breakwater	10,434 08		
Green Point—Breakwater	1,190 05		
Hampstead—Wharf repairs	757 16		
Harbours and Rivers Generally—Repairs and improvements	36,882 05		
Heron Island—Wharf addition and repairs	3,506 51		
Heustis Landing—Wharf repairs	1,112 10		
Hopewell Cape—Wharf repairs	2,225 65		
Humphrey's—Wharf reconstruction	2,136 86		
Lower Caraquet—Wharf repairs	4,562 28		
McDonald's Point—Wharf repairs	877 80		
Mill's Point—Wharf enlargement and repairs	9,189 88		
Miscou—Wharf repairs	699 91		
Mispec—Breakwater repairs	1,522 31		
Neguac—Wharf repairs	1,399 57		
Oak Point—Wharf repairs	3,715 91		
Petit Rocher—Breakwater repairs	2,855 79		
Pointe du Chene—Repairs to breakwater and wharf	8,976 83		
Point Sapin—Breakwater extension	205 68		
Port Elgin—Wharf	1,893 32		
Richibucto Beach—Repairs to breakwaters	1,811 86		
Richibucto Cape—Repairs to breakwater and pier	2,932 74		
Scotchtown—Wharf repairs	875 64		
Seal Cove—Breakwater repairs	772 55		
Shediac—Wharf repairs	5,095 12		
Shippigan—Wharf repairs	3,322 30		
Shippigan—Warehouse on wharf	3,418 06		
Shippigan Gulley—Repairs to breakwaters and breastworks	7,951 75		
St. Andrews—Wharf repairs	4,992 91		
St. Simon—Wharf	124 21		
Tracadie Harbour—Breastworks and breakwaters	124 05		
Welchpool—Wharf repairs	4,514 72		
White Head—Wharf repairs	1,258 87		
White's Cove—Wharf repairs	4,499 90		
		160,587 74	
Carried forward		841,926 13	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—Chargeable to Income—*Continued*

——	$ cts.	$ cts.	$ cts.
Brought forward	.....	841,926 13	7,355,382 64
Construction, Maintenance, Repairs, Etc.—*Continued*			
Harbours and Rivers—*Continued*			
Quebec—			
Angliers—Wharf	3,721 35		
Anse à Beaufils—Reconstruction of and repairs to jetties	2,199 05		
Anse à la Barbe—Harbour improvements	2,691 41		
Anse aux Gascons—Wharf repairs and improvements	5,014 57		
Baie St. Paul—In full and final settlement of the claim of T. Lacouline in connection with his contract for bank protection	1,020 00		
Bagotville—Wharf repairs	19,755 89		
Barachois de Malbaie—Breakwater repairs	4,394 24		
Batiscan River—Dredging	12,001 37		
Batiscan—Protection to channel	2,350 00		
Beaupre—Dredging; the Ste. Anne Paper Company to contribute one-third of the cost	26,143 43		
Beloeil Village—Reconstruction of wharf	3,801 08		
Bersimis—Construction of approach to wharf	2,919 24		
Bic—To complete wharf reconstruction	2,491 04		
Bonaventure—Wharf repairs	2,432 45		
Bonaventure West—Breakwater	3,995 05		
Cacouna—Wharf extension	2,030 65		
Cap à l'Aigle—Wharf repairs	9,905 34		
Cap de la Madeleine—Wharf	11,964 87		
Cap de la Madeleine—Wharf extension	74,974 26		
Cap Chat—Wharf extension	3,957 33		
Cape Cove—To complete shore protection	1,273 34		
Cap St. Ignace—Wharf repairs	3,694 98		
Champlain—Wharf repairs	1,681 78		
Chandler—Wharf reconstruction and extension	8,468 15		
Chandler—In full and final settlement of the claim of Messrs. Farley and Grant of Ottawa in connection with their contract for wharf reconstruction and extension at Chandler, P.Q.	5,938 05		
Charlemagne—Dredging	14,994 25		
Chicoutimi Basin—Wharf repairs	2,549 24		
Choisy—Wharf reconstruction	3,914 43		
Clark City—Wharf repairs	3,599 74		
Colonie des Greves—Wharf	9,526 35		
Crabtree Mills—Reconstruction of icebreaker	5,188 14		
D'Aiguillon—Breakwater	3,592 28		
Deschambault—Wharf repairs	121 82		
Dalbeau (Grosse Loche)—Wharf repairs	1,139 39		
Doucet's Landing (Ste. Angele de Laval—Wharf reconstruction	39,891 47		
Douglastown—Repairs to wharf and shed	998 02		
East Templeton—Wharf repairs	1,130 23		
Ellis Bay—Harbour improvements	150,000 00		
Etang du Nord—Breakwater wharf	470 12		
Fabre—Wharf repairs	1,160 94		
Fame Point—Removal of boulders	1,800 35		
Father Point—Wharf repairs and improvements	11,572 94		
Fort William—Wharf repairs	1,018 82		
Garthby—Wharf repairs	790 62		
Grand Mere—Landing	10 00		
Grandes Bergeronnes—Removal of boulders	1,532 65		
Grande Rivière—Wharf reconstruction	6,560 33		
Grindstone (M.I.)—Wharf repairs and improvements	39,195 08		
Grosse Isle—Wharf repairs	9,758 98		
Harbours and Rivers Generally—Repairs and improvements	68,739 86		
Hopetown—Miller and Mann Road—Breakwater	1,761 21		
House Harbour—Wharf repairs	1,599 83		
Ile aux Coudres—Wharf	2,414 09		
Ile aux Coudres North—Wharf repairs	3,368 63		
Carried forward	607,218 73	841,926 13	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—Chargeable to Income—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	607,218 73	841,926 13	7,355,382 64
Construction, Maintenance, Repairs, Etc.—*Continued*			
Harbours and Rivers—*Continued*			
Quebec—Continued—			
Ile aux Grues—Wharf replacement	3,128 34		
Ile Perrot Sud—Wharf reconstruction	1,948 44		
Ile Verte—Wharf repairs and improvements	4,409 98		
Kamouraska—Wharf repairs and shed	769 47		
Lachine—Wharf repairs	609 92		
Lac Megantic—Shore protection	3,014 87		
Lake St. Louis—Dredging	47,029 72		
Lanoraie—Ice breakers	2,741 58		
L'Anse a Valleau—Training jetty	967 38		
Le Fils—Breakwater	1,100 00		
L'Islet—Wharf repairs	1,295 59		
Lower Miguasha—Wharf	1,998 52		
Magog—Wharf repairs	889 24		
Mal Bay—Wharf repairs	4,635 00		
Matane—Breakwater repairs	4,034 91		
Mechins—Wharf reconstruction and improvements	14,991 48		
Mille Vaches—Wharf enlargement	1,500 26		
Montmagny—Wharf extension	9,951 88		
New Carlisle—Wharf reconstruction	4,905 41		
Nicolet—Dredging	14,322 68		
Nicolet—Repairs to jetty	2,991 62		
Norton Creek—Dredging	3,527 85		
Nouvelle River—Breakwater	3,260 80		
Papineauville—Wharf improvements	3,996 93		
Paspebiac—Wharf repairs	3,399 97		
Peribonka—Wharf reconstruction	2,360 62		
Petits Capucins—Pier and removal of boulders	3,749 24		
Petite Rivière St. François—Breakwater wharf	4,813 72		
Petite Vallée—Wharf extension	1,981 95		
Pointe au Pic (Murray Bay)—Wharf repairs	4,535 19		
Pointe Basse—Wharf repairs and improvements	9,317 10		
Port Daniel East—Wharf repairs	999 98		
Repentigny—Wharf repairs	1,037 94		
Rimouski—Wharf repairs. and improvements	10,055 73		
Rimouski—Dredging	30,177 38		
Rivière au Renard—Wharf improvements	11,101 65		
Rivière au Tonnerre (Duck Creek)—Harbour Improvements	2,000 10		
Rivière du Lievre Lock and Dam—Reconstruction of Lockmaster's house at Poupore	1,996 40		
Rivière du Loup (en bas)—Wharf repairs and reconstruction	14,967 39		
Rivière du Loup (en haut)—Dredging	46,338 48		
Rivière Ouelle—Wharf	4,473 57		
Rivière St. François—Dredging	19,100 01		
Rivière Verte—Wharf replacement	4,503 07		
Roberval—Breakwater reconstruction	9,842 19		
Ruisseau a la Loutre—Wharf repairs and extension	3,911 94		
Ruisseau Leblanc—Breakwater	2,646 68		
Ste. Anne de Beaupre—Wharf reconstruction	11,782 58		
Ste. Anne de Bellevue—Wharf reconstruction	3,699 86		
Ste. Anne de Chicoutimi—Wharf repairs	2,972 15		
Ste. Anne de la Pocatiere—Wharf repairs	1,240 77		
Ste. Anne des Monts—Wharf repairs	4,503 88		
St. Charles—Wharf repairs	1,307 01		
St. Charles de Caplan—Wharf repairs	1,998 27		
St. Dominique du Lac—Wharf extension and improvements	2,673 19		
St. Felicien—Wharf repairs	1,407 38		
St. Fulgence—Wharf repairs	1,432 44		
St. Gedeon (Lac St. Jean)—Wharf reconstruction	9,993 62		
Carried forward	981,562 05	841,926 13	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—Chargeable to Income—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	981,562 05	841,926 13	7,355,382 64
Construction, Maintenance, Repairs, Etc.—*Con.*			
Harbours and Rivers—*Continued*			
Quebec—Concluded			
St. Gregoire de Montmorency—Reconstruction of revetment wall	89 51		
St. Hilaire—Wharf reconstruction	2,673 72		
St. Ignace de Loyola—Repairs to wharf and approach	5,637 68		
St. Irenee—Wharf repairs	786 53		
St. Jean, Port Joli—Wharf repairs	2,716 89		
St. Jean Deschaillons—Wharf repairs	8,017 19		
St. Joachim—Wharf	2,363 87		
St. Lambert—Reconstruction and repairs to dyke	14,999 94		
St. Laurent d'Orleans—Wharf repairs	1,948 24		
St. Louis River—Dredging	45,905 76		
Ste. Luce—Wharf repairs	1,233 53		
St. Marc—Repairs to wharves	694 66		
St. Mathias—Wharf reconstruction	2,825 65		
St. Michel de Bellechasse—Dredging	6,945 89		
Ste. Monique, Lac St. Jean—Wharf repairs	1,634 17		
St. Ours—Wharf repairs	1,580 13		
St. Paul, Ile aux Noix—Widening right-of-way	1,000 57		
Ste. Petronille (I.O.)—Wharf repairs and improvements	2,274 59		
St. Pierre les Becquets—Dredging, shed and repairs to wharf approach	2,334 54		
St. Roch de Mekinac—Wharf	1,789 83		
St. Roch des Aulnaies—Wharf repairs and improvements	1,665 55		
St. Simeon de Bonaventure—Protection work	2,632 50		
St. Simeon de Bonaventure — Breakwater-wharf extension	1,305 16		
St. Simeon (Riviere Noire) Breakwater extension	2,696 64		
St. Sulpice—Wharf repairs and improvements to approach	1,287 88		
Sabrevois—Wharf repairs	2,218 62		
Senneterre—Wharf	2,797 10		
Silleiy (Pointe Pizeau)—Wharf repairs	1,488 39		
Sorel—Harbour improvements	40,755 18		
Squatteck—Wharf repairs	534 16		
Tadoussac (Anse Tadoussac)—Wharf repairs	4,322 91		
Tadoussac (Anse a l'Eau)—Wharf repairs	4,464 25		
Templeton—Dredging	36,126 24		
Trois Pistoles—Wharf repairs	2,399 71		
Trois Rivieres—Wharf reconstruction	353 21		
Valleyfield—Dredging	48,074 56		
Varennes—Dredging	44,674 95		
Vercheres—Wharf improvements—To complete payments	782 31		
Yamaska—Wharf repairs	2,438 67		
		1,290,032 93	
Ontario—			
Bayfield—Repairs to piers	1,002 99		
Blind River—Dredging—To complete payments	7,696 20		
Bracebridge—Breakwater reconstruction	2,999 30		
Bruce Mines—Wharf repairs	1,476 88		
Callander—Wharf repairs	711 41		
Chatham—Repairs to revetment wall	1,752 13		
Cobourg—Harbour improvements	24,480 26		
Collingwood—Harbour improvements	22,330 70		
Desbarats River—Dredging	2,994 80		
Dyer's Bay—Wharf repairs	1,136 73		
Goderich—Harbour improvements	64,581 19		
Grand Bend—Repairs and approach to pier	2,802 82		
Gravenhurst (Gull Lake)—Wharf	1,513 90		
Harbours and Rivers Generally—Repairs and improvements	47,961 78		
Holland River—Wharf repairs	829 80		
Carried forward	184,270 89	2,131,959 06	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	184,270 89	2,131,959 06	7,355,382 64
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Con.*			
HARBOURS AND RIVERS—*Continued*			
Ontario—Concluded			
Honey Harbour—Dredging	203 26		
Huntsville—Wharf repairs	4,718 41		
Kagawong—Wharf repairs and extension	3,285 49		
Kenora—Wharf	10,900 00		
Kenora—Wharf repairs	1,173 73		
Kincardine—Repairs to piers	14,671 09		
Kincardine—Dredging	19,173 62		
Kingston, R. M. C.—Repairs to wharves and boat-houses	1,079 83		
Kingsville—Repairs to piers	3,076 56		
Maidens Creek—Wharf	2,192 49		
Mattagami Landing—Wharf	3,818 07		
Meaford—Towards reconstruction of revetment wall	9,886 56		
Midland—Dredging	99,394 79		
Midland—Wharf and dredging	9,982 68		
Mitchell's Bay—Dredging	6,357 64		
Muskoka Narrows—Guide pier	3,392 58		
Nipigon—Wharf	3,015 31		
North Bay—Wharf repairs	940 73		
Owen Sound—Harbour improvements	70,014 32		
Owen Sound—Repairs to wall	2,975 98		
Pelee Island—Repairs to piers	4,240 44		
Port Arthur—Harbour improvements—Thunder Bay Paper Co. to contribute one-third of cost	67,053 86		
Port Burwell—Harbour repairs and improvements	23,060 06		
Port Dover—Dredging and harbour improvements	12,693 03		
Port Elgin—Repairs to harbour works	4,015 01		
Port Findlay—Wharf repairs	1,244 83		
Port Hope—Harbour improvements	13,442 73		
Port Maitland—Dredging	6,274 94		
Port Maitland—Repairs to pier and sheet piling	27,012 31		
Port Stanley—Harbour improvements and repairs	40,815 39		
Prescott—Dredging	12,534 38		
Presqu'Ile—Dredging	23,463 57		
Providence Bay—Dredging	5,895 40		
Rondeau—Dredging	112 00		
Rondeau—Extension to cribwork protection	2,490 41		
Rondeau—Repairs to pier	12,536 09		
Rossport—Wharf repairs	886 75		
Sarnia—Dredging	123,164 27		
Saugeen River—Repairs to harbour works	21,612 73		
Sault Ste. Marie—Harbour improvements	121,470 25		
Sault Ste. Marie—Wharf improvements	1,993 15		
Sault Ste. Marie—Wharf repairs	989 41		
Shoepack Bay—Wharf and shed	3,666 35		
Southampton—Repairs to breakwaters	3,399 99		
Stanley Island—Wharf reconstruction	2,244 54		
Thessalon—Wharf repairs and improvements	1,927 78		
Toronto—Dredging	13,909 14		
Trenton—Wharf repairs	3,867 91		
Vermilion Bay—Wharf	1,533 16		
Wendover—Wharf repairs	3,561 60		
Windsor—Wharf repairs	1,996 70		
White Cloud Island—Wharf repairs	1,994 20		
		1,019,626 41	
Manitoba—			
Assiniboine River—Reconstruction of dykes	2,964 53		
Gimli—Repairs to pier	65 75		
Harbours and Rivers Generally—Repairs and improvements	9,999 69		
Hecla—Wharf extension	11,930 37		
Pelican Lake—Improvements	4,787 95		
Carried forward	29,748 29	3,151,585 47	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—Chargeable to Income—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	29,748 29	3,151,585 47	7,355,382 64
Construction, Maintenance, Repairs, Etc.—*Con.*			
Harbours and Rivers—*Continued*			
Manitoba—Concluded			
Red River (Mouth)—Repairs to jetties	40 00		
Riverton—Wharf	2,078 20		
Roseau Rive.—Improvements	5,875 88		
Steep Rock—Wharf	2,604 76		
To cover cost of repairs to the Wanipigow River Dam, Man. (Governor General's Warrant of October 7th, 1927)	2,755 98		
		43,103 11	
Saskatchewan and Alberta—			
Athabasca River—Improvements	275 39		
Fort Resolution—Wharf	8,564 61		
Harbours and Rivers Generally—Repairs and improvements	4,306 01		
Regina Beach—Wharf	4,333 20		
		17,529 21	
British Columbia—			
Alberni—Wharf repairs	1,215 85		
Argenta—Wharf repairs	1,029 86		
Bamfield (West)—Extension and repairs to float	1,188 29		
Bold Point—Renewal of float and approach	3,451 00		
Church House—Repairs to float and approach	847 30		
Columbia River, below Burton—Bank protection	4,653 96		
Crooked, Pack and Parsnip Rivers—Channel improvements	3,387 94		
Denman Island—Wharf extension and repairs	1,954 88		
Dewdney—Wharf replacement	2,359 41		
East Arrow Park—Wharf repairs	1,781 18		
East Robson—Wharf repairs	1,679 06		
Edgewood—Wharf repairs	2,696 17		
False Creek —Dredging	11,389 68		
Fauquiers—Wharf repairs	2,019 60		
Fraser River—Contribution towards the construction of a wing dam near Agassiz, B.C., the Provincial Government and the Corporation of the District of Kent, B.C., each to contribute a like amount	1,000 00		
Fraser River—Improvements	149 556 80		
Fraser River—Lower—Operation of snag boat	22,655 99		
Gabriola Island (Centre)—Wharf repairs	2,596 71		
Gibson's Landing—Wharf repairs	3,121 23		
Grace Harbour—Wharf repairs	991 44		
Grantham's Landing—Wharf repairs	1,047 24		
Harbours and Rivers Generally—Repairs and improvements	57,073 44		
Heriot Bay—Wharf repairs	1,199 25		
Jeune Landing—Wharf	7,994 85		
Kootenay Bay—Reconstruction of float	1,937 51		
Maples—Wharf repairs	1,119 75		
Nanaimo—Improvements to wharf and float	77 40		
New Westminster—Wharf repairs	1,501 76		
New Massett—Wharf repairs	2,271 26		
Nootka Island—Wharf repairs	3,692 47		
Okanagan River—Reconstruction of Dam	150 00		
Penticton—Reconstruction of wharf	1,549 54		
Phipps Point, Hornby Island—Extension to landing	1,399 06		
Port Alberni—Assembly wharf	127 35		
Port Clements—Wharf repairs	2,998 39		
Port Coquitlam—Float	1,726 20		
Port Simpson—Renewal of wharf approach	8,602 02		
Powell River—Breakwater—The Powell River Co., Ltd. to contribute one-half of cost	19,372 89		
Powell River—Wharf improvements	9,592 78		
Quathiaski Cove—Float	1,125 00		
Carried forward	344,134 51	3,212,217 79	7,355,382 64

Appendix No. 11—Continued

PUBLIC WORKS—CHARGEABLE TO INCOME—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward	344,134 51	3,212,217 79	7,355,382 64
CONSTRUCTION, MAINTENANCE, REPAIRS, ETC.—*Con.*			
HARBOURS AND RIVERS—*Concluded*			
British Columbia—Concluded			
Quatsino—Wharf repairs	1,490 50		
Russell's Landing—Wharf repairs	1,992 75		
Sandspit—Wharf repairs	2,512 19		
Salmon Arm—Wharf repairs	5,560 47		
Seton Lake—Wharf	3,482 10		
Shaw's Landing—Replacement of float	1,800 00		
Sidney—Maintenance of ferry slip	2,700 00		
Sooke—Wharf repairs	1,400 23		
Sturdies Bay—Wharf repairs	2,531 67		
Summerland—Wharf repairs	1,324 24		
Sunshine Bay—Wharf repairs	771 92		
Tofino—Wharf repairs	36 00		
Ucluelet East—Renewal of float and approach	1,336 49		
Vancouver—Stanley Park—Foreshore protection	7,994 24		
Vancouver—Wharf repairs	1,211 75		
Victoria Harbour—Dredging	50,817 35		
West Bay, Gambier Island—Float replacement	980 43		
Whaletown—Wharf repairs	1,449 50		
		433,526 34	
Yukon—			
Stewart and Yukon Rivers—Improvements		5,000 00	
Generally—			
Harbours and Rivers Generally		29,251 74	
Total Harbours and Rivers			3,679,995 87
DREDGING			
Dredging—Maritime Provinces		493,657 84	
Dredging—Ontario and Quebec		533,079 40	
Dredging—Manitoba, Saskatchewan and Alberta		85,220 34	
Dredging—British Columbia		225,875 14	
			1,337,832 72
ROADS AND BRIDGES			
Dominion Roads and Bridges Generally		2,800 75	
International Bridge over St. Croix River between St. Croix, N.B., and Vanceboro, Maine, the State of Maine to contribute a like amount		7,654 68	
Killarney, Man.—Contribution to Provincial Government for construction of bridge		3,000 00	
Kingston—Repairs to La Salle Causeway		10,997 24	
Ottawa—Maintenance and repairs to bridges and approaches		6,929 96	
Shellmouth, Man.—Repairs to bridge over Assiniboine river		1,801 54	
St. Marjorique, Que.—Repairs to bridge approaches		3,988 88	
			37,173 05
TELEGRAPH AND TELEPHONE LINES			
Nova Scotia—			
Cape Breton Telegraph Line—Extension to Pipers Glen	818 30		
Cape Breton Telegraph and Telephone Lines—General repairs and improvements	6,776 41		
Extension of Whycocomagh-Inverness Telephone line to Roseburn	452 89		
Telegraph circuit between Hawkesbury and Arichat	3,081 33		
Telephone line from Grass Cove to St. Columba	424 60		
		11,553 53	
Carried forward		11,553 53	12,410,384 28

Appendix No. 11—Continued

PUBLIC WORKS—Chargeable to Income—*Continued*

—	$ cts.	$ cts.	$ cts.
Brought forward		11,553 53	12,410,384 28
Construction, Maintenance, Repairs, Etc.—*Con.*			
Telegraph and Telephone Lines—*Con.*			
New Brunswick—			
Telephone line from Grand Anse to Mizonette		1,613 93	
Quebec—			
Beauport Telephone Line—Extension from St. Brigitte de Laval to La Branche	636 22		
Extension of Quebec County Telephone Line	299 89		
Installation of cable between Cabano and Squatteck	2,550 43		
Magdalen Islands Telephone Service—General repairs and improvements	1,956 80		
Telephone line from cable landing to Notre Dame de l'Ile Verte	495 88		
		5,939 22	
Ontario—			
Pelee Island Cable		4,303 13	
Saskatchewan and Alberta—			
Alberta and Saskatchewan Telegraph and Telephone Lines—General repairs and improvements	12,074 58		
Battleford—Isle la Crosse Telegraph Line—General repairs and improvements	3,985 47		
Telegraph line from Meadow Lake to Loon Lake	7,988 64		
		24,048 69	
British Columbia—			
British Columbia, Northern District—General repairs and improvements	4,807 37		
Mainland Telegraph and Telephone Lines—General repairs and improvements	16,009 65		
Powell River Line—Extension of line from Buccaneer Bay to Lasqueté Island	11,010 26		
Telephone Line from Barriere to Blucher Hall	1,613 73		
Telephone Line from Likely to Keithley Creek	4,027 32		
Vancouver Island District—General repairs and improvements	21,362 78		
Vancouver Island District—Purchase of cable	6,751 80		
		66,082 91	
			113,541 41
Miscellaneous			
Accounts Branch—Salaries of agents, clerks, travelling and contingent expenses of Outside Service		22,452 58	
Architectural Branch—Salaries of architects, clerks, messengers of Outside Service		68,126 62	
Compassionate allowance to Flossie King Laflamme, widow of J. K. Laflamme, Senior Assistant engineer at Quebec, who was drowned while on duty on October 15, 1926		2,500 00	
Compassionate allowance to Napoléon Bellemare, Sr., father of Napoléon Bellemare, Jr., who was drowned while on duty at Caughnawaga, Que., on September 21st, 1925		1,200 00	
Engineering Branch—Salaries of engineers, inspectors, superintendents, draftsmen, clerks and messengers of Outside Service		466,328 97	
For operation and maintenance of Inspection Boats		13,868 90	
Gratuity to Adrien Philion who was seriously injured in 1913 while working on foundation of new Customs House building, Ottawa		1,000 00	
Maintenance and operation of water storage dams on the Ottawa River and tributaries, surveys in connection therewith and settlement of land damages		88,097 01	
Monument to Sir Wilfrid Laurier		19,147 39	
National Gallery of Canada		99,886 05	
National Monument on Connaught Place		10,000 00	
Carried forward		792,607 52	12,523,925 69

Appendix No. 11—Continued

PUBLIC WORKS—Chargeable to Income—*Concluded*

—	$ cts.	$ cts.	$ cts.
Brought forward		792,607 52	12,523,925 69
Construction, Maintenance, Repairs, Etc.—*Con.*			
Miscellaneous—*Concluded*			
River gauging and metering		16,273 79	
Surveys and inspections		113,059 69	
To cover award for permanent partial disability and also medical and hospital expenses in the case of Horace Sherman Mitchell, telegraph repairer of this department at Campobello, N.B., who was injured while attending to his duties for the department at Eastport, Me., U.S.A., and beyond the jurisdiction of any Canadian workmen's compensation law		2,577 50	924,518 50
Subsidies to Dry Docks (Under Statute)			
Burrard Dry Dock (North Vancouver, B.C.)		112,500 00	
Collingwood Dry Dock No. 2		9,208 96	
Montreal Floating Dock		105,000 00	
Port Arthur Dry Dock		37,741 50	
Prince Rupert Floating Dock		76,970 88	
St. John Dry Dock		247,500 00	588,921 34
Total Public Works Chargeable to Income			14,037,365 53

Appendix No. 11—Concluded

PUBLIC WORKS—Chargeable to Collection of Revenue

—	$ cts.	$ cts.	$ cts.
Sundry Works—			
Collection of Public Works Revenue	2,131 20		
Graving Docks	169,908 23		
Harbours and Rivers	44,735 40		
		216,774 83	
Telegraph and Telephone Lines—			
Alberta and Saskatchewan	108,737 26		
British Columbia—Mainland	82,797 91		
British Columbia—Northern District	71,494 71		
British Columbia—Vancouver Island District	129,022 36		
Lower St. Lawrence and Maritime Provinces	190,275 32		
Prince Edward Island and the Mainland	6,946 66		
Telegraph and Telephone Service—Generally	*4,607 96		
Yukon System (Ashcroft-Dawson)	131,887 07		
		725,769 25	
			942,544 08

Appendix No. 12

Details of Expenditure of the Department of National Defence on account of Adjustment of War Claims, Militia Services, for the fiscal year ended March 31, 1928.

—	$ cts.	$ cts.
Canadian War Graves	22,002 16	
Civilian employees	5,162 90	
Estates of deceased soldiers	1,480 16	
Freight and cartage on stores	16,513 81	
Historical section	22,268 16	
Legal expenses	305 34	
Medals and memorial crosses	924 45	
Miscellaneous	2,713 26	
Ordnance services	16,088 20	
Pay and allowances	6,024 86	
Postage	1,688 99	
Printing and stationery	2,205 73	
Separation allowances	14,524 08	
War Service gratuity	9,681 06	
Washington memorial	11,046 89	
		132,630 05

Appendix No. 13

INTEREST ON INVESTMENTS

From what Source Received and Nature of Investment	Time	To what date paid	Rate of Interest	Amount Invested	Interest Realized	
					Sterling	Currency
			p.c.	£ s. d.	£ s. d.	$ cts.
SINKING FUNDS						
Loan of 1909-34						
Canadian Securities.....	1 year..	Oct. 1, 1927	2½	110,552 6 3	2,763 16 2	13,450 54
	½ year..	July 1, 1927	3	279,205 5 2	4,188 1 7	20,381 98
	½ year..	Jan. 1, 1928	3	282,705 5 2	4,240 11 7	20,637 49
	½ year..	June 1, 1927	3½	1,233,658 5 1	21,589 0 5	105,066 57
	½ year..	Dec. 1, 1927	3½	1,249,268 7 4	21,862 3 11	106,396 02
	½ year..	July 1, 1927	3½	866,690 8 2	15,167 1 6	73,813 10
	½ year..	Jan. 1, 1928	3½	916,454 2 4	16,037 18 11	78,051 33
	1 year..	Oct. 1, 1927	4	251,775 4 8	10,071 0 2	49,012 24
					95,919 14 3	466,809 27
Loan of 1930-50						
Canadian Securities.....	1 year..	Oct. 1, 1927	2½	95,943 19 1	2,398 12 0	11,673 18
	½ year..	July 1, 1927	3	573,591 13 10	8,603 17 6	41,872 19
	½ year..	Jan. 1, 1928	3	596,591 13 10	8,948 17 6	43,551 19
	1 year..	Dec. 1, 1927	3½	189,527 6 1	6,633 9 2	32,282 82
	½ year..	July 1, 1927	3½	2,505,254 1 1	43,841 19 0	213,364 15
	½ year..	Jan. 1, 1928	3½	2,636,586 13 4	46,140 5 4	224,549 30
	1 year..	Oct. 1, 1927	4	868,359 8 10	34,734 7 6	169,040 62
					151,301 8 0	736,333 45
Loan of 1940-60						
Canadian Securities.....	1 year..	Oct. 1, 1927	2½	64,778 6 2	1,619 9 2	7,881 36
	½ year..	July 1, 1927	3	294,317 18 8	4,414 15 5	21,485 22
	½ year..	Jan. 1, 1928	3	324,417 18 8	4,866 5 5	23,682 52
	1 year..	Dec. 1, 1927	3½	130,868 16 2	4,580 8 2	22,291 32
	½ year..	July 1, 1927	3½	1,050,916 3 3	18,391 0 8	89,503 03
	½ year..	Jan. 1, 1928	3½	1,076,226 0 11	18,833 19 1	91,658 58
	1 year..	Oct. 1, 1927	4	628,819 10 10	25,152 15 8	122,410 22
					77,858 13 7	378,912 25
					325,079 15 10	1,582,054 97
Canadian Securities—				$ cts.	$ cts.	
War Loan 1916-31.....	1½ year.	April 1, 1928	5	779,300 00	59,947 50	
War Loan 1917-37.....	1 year..	Mar. 1, 1928	5	379,800 00	18,990 00	
						78,937 50
Total Sinking Funds....	.....	.....	.....	.....	.....	1,660,992 47
LOANS TO BANKS						
Under the Finance Act, Chap. 70. R.S. 1927.....	Various.	.....	.....	.....	.....	524,202 29
LOANS TO PROVINCES						
British Columbia.....	1 year..	Dec. 31, 1927	5	1,701,500 00	.....	85,075 00
Manitoba.....	1 year..	Dec. 1, 1927	5	1,430,000 00	71,500 00	
	1 year..	Feb. 15, 1928	5	395,000 00	19,750 00	
	19 days.	Dec. 20, 1927	5	165,000 00	429 45	
						91,679 45
Carried forward..	.....	.....	.....	.....	.....	2,361,949 21

Appendix No. 13—Continued

INTEREST ON INVESTMENTS—*Continued*

From what Source Received and Nature of Investment	Time	To what date paid	Rate of Interest	Amount Invested	Interest Realized	Total
			p.c.	$ cts.	$ cts.	$ cts.
Brought forward	.....	.....	.....	.....	.....	2,361,949 21
LOANS TO PROVINCES—*Con.*						
New Brunswick	1 year	Oct. 16, 1927	5	517,000 00	25,850 00	
	1 year	Dec. 28, 1927	5	285,000 00	14,250 00	
	½ year	July 22, 1927	5	506,000 00	12,650 00	
	½ year	Jan. 22, 1928	5	481,000 00	12,025 00	
						64,775 00
Nova Scotia	1 year	Nov. 11, 1927	5	300,000 00	15,000 00	
	1 year	Nov. 20, 1927	5	200,000 00	10,000 00	
	1 year	Feb. 19, 1928	5	200,000 00	10,000 00	
	1 year	Mar. 1, 1928	5	300,000 00	15,000 00	
	1 year	Mar. 15, 1928	5	500,000 00	25,000 00	
	1 year	April 2, 1928	5	37,000 00	1,850 00	
						76,850 00
Ontario	½ year	July 31, 1927	5	4,250,000 00	106,250 00	
	122 days	Nov. 30, 1927	5	4,250,000 00	71,027 39	
	½ year	Aug. 1, 1927	5	2,000,000 00	50,000 00	
	121 days	Nov. 30, 1927	5	2,000,000 00	33,150 68	
	½ year	Sept. 14, 1927	5	600,000 00	15,000 00	
	77 days	Nov. 30, 1927	5	600,000 00	6,328 76	
	½ year	Sept. 26, 1927	5	2,500,000 00	62,500 00	
	65 days	Nov. 30, 1927	5	2,500,000 00	22,260 27	
						366,517 10
Prince Edward Island	1 year	Oct. 17, 1927	5	50,000 00	.....	2,500 00
Quebec	Various	Dec. 31, 1927	5	7,317,402 72	.....	366,880 70
FOREIGN GOVERNMENTS						
Belgian Government (Sale of horses)	1 year	Mar. 12, 1928	5	4,528,336 00	.....	226,416 80
Greek Government Loan	½ year	June 30, 1927	5	7,475,000 00	186,875 00	
	½ year	Dec. 31, 1927	5	7,380,000 00	184,500 00	
	Various	.....	5	.....	83,748 72	
						455,123 72
Roumanian Government Loan	1 year	April 1, 1928	4	23,969,720 00	.....	958,780 00
Montreal Harbour Debentures	1 year	July 1, 1927	3	9,250,000 00	277,500 00	
	½ year	Jan. 1, 1928	3	8,250,000 00	123,750 00	
	87 days	Sept. 26, 1927	3	1,000,000 00	7,150 68	
	1½ year	Jan. 1, 1928	3½	17,235,000 00	904,837 50	
	½ year	Jan. 1, 1927	5	19,550,000 00	488,750 00	
	Various	Jan. 1, 1927	5	840,000 00	4,487 71	
	1 year	Jan. 1, 1928	5	20,390,000 00	1,019,500 00	
	Various	Jan. 1, 1928	5	1,835,000 00	23,628 76	
						2,849,604 65
Vancouver Harbour Debentures	½ year	July 1, 1927	5	13,810 900 00	345,272 50	
	Various	July 1, 1927	5	596,000 00	10,315 06	
	½ year	Jan. 1, 1928	5	14,406,900 00	360,172 50	
	Various	Jan. 1, 1928	5	946,000 00	7,571 91	
						723,431 97
Seed Grain and Relief Advances	.....	.....	.....	.....	.....	119,741 85
SOLDIER AND GENERAL LAND SETTLEMENT						
Soldier land settlement loans	Various	Various	5	.....	2,025,842 80	
General land settlement loans	Various	Various	5	.....	43,780 21	
						2,069,623 01
Carried forward	.....	.....	.....	.....	.....	10,642,094 01

Appendix No. 13—Concluded

INTEREST ON INVESTMENTS—*Concluded*

From what Source Received and Nature of Investment	Time	To what date paid	Rate of Interest	Amount Invested	Interest Realized	Total
			p.c.	$ cts.	$ cts.	$ cts.
Brought forward	.....	.....	.....	.....	.....	10,642,094 01
MISCELLANEOUS						
Interest on Current Account with the—						
Bank of Montreal, London England	Various	Dec. 31, 1927	.....	.....	63,284 88	
Bank of Montreal, New York	Various	Jan. 31, 1928	.....	.....	43,815 53	
Other Current Accounts	1 year	Mar. 31, 1928	.....	.....	81,713 45	
Interest on Special Funds—						
Bank of Montreal, Montreal	.....	.....	.....	.....	8,008 77	
Canadian Government Merchant Marine—						
Interest on Ships Sold	Various	Various	Various	.....	12,599 92	
Montreal Turnpike Trust Corporation—						
Interest under Commutation Agreements	Various	Various	6	.....	10,005 44	
Province of Quebec Debt Account	1 year	Jan. 1, 1928	4	1,473,609 63	58,944 38	
St. John Bridge and Railway Extension Company	1 year	July 1, 1927	4	433,900 00	17,356 00	
						295,728 37
						10,937,822 38

Appendix No. 14

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1928.

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Agriculture—			
Car inspection		65,713 51	
Cleaning seed grain		113 85	
Fumigating charges		7,071 80	
Inspection fees and health certificates		12,665 33	
Prize money		379 00	
Race track supervision	25,480 28		
Less payments	21,602 85		
		3,877 43	
Refunds of previous year's expenditure		16,420 08	
Sale of produce—Experimental Farms		186,080 91	
Sale of publications		473 95	
Sale of sundries		1,701 93	
Seed testing charges		11,576 99	
Sundry fees		38,393 57	
			344,468 35
Archives—			
Copying		13 00	
Refunds of previous year's expenditure		1 30	
			14 30
Civil Service Commission—			
Examination fees			10,417 25
External Affairs—			
Passport fees	145,116 83		
Less—Refunds	1,533 86		
		143,582 97	
Refunds of previous year's expenditure		914 40	
Refunds of previous year's expenditure High Commissioners office		163 34	
Visa fees		542 00	
			145,202 71
Finance—			
Bank inspection	19,370 84		
Conscience money	933 90		
Departmental deposits unclaimed	214 76		
Interest on excess circulation	15,991 79		
Refunds of previous year's expenditure	700 34		
Registration and insurance fees	16,277 42		
Registration fees—Bank Act	2,586 75		
Re Montgomery Escheat case	25,391 22		
Sale of pulp	1,269 02		
Sterling exchange refunds	924 33		
Sundries	1 25		
		83,661 62	
Royal Mint—			
Charges for making assays	25 50		
Charges for making dies	263 96		
Charges for refining gold	79,010 57		
Charges for refining silver	249 64		
Charges for repairing balance	10 32		
Charges for rolling silver	1 50		
Charges for striking Confederation medals	14,785 96		
Charges on sale of gold trade bars	547 33		
Excess value of gold shipped to New York	213 19		
Profit on copper coinage	41,663 45		
Profit on gold coinage	19,071 90		
Profit on nickel coinage	207,598 60		
Profit on silver coinage	517 89		
Profit on sale of bronze used in medals	1,427 88		
Sale of fine silver	915 77		
Sale of nickel brockages	169 34		
Sale of silver proof plate	36 00		
Sale of silver sweep	1,731 82		
		368,240 62	
			451,902 24
Carried forward			952,004 85

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1928—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			952,004 85
Health—			
Fees—Food and drug analysis		4,346 00	
" Opium and narcotic drug licenses		3,320 30	
" Patent medicine license and registration		6,511 00	
Fumigation of ships		22,253 50	
Hospital care of passengers		14,354 00	
Refunds of previous year's expenditure		549 65	
Sale of sundries		87 00	
Use of launch *Evelyn*		1,800 00	
			53,221 45
House of Commons—			
Private bills	33,227 48		
Less—Refunds	3,716 50		
		29,510 98	
Refunds of previous year's expenditure		15 00	
Sale of sundries		6 30	
			29,532 28
Immigration and Colonization—			
Commission on telephones		1 90	
Interest on trust account		54 97	
Letter of identification fees		920 00	
Refund for goods lost or damaged in transit		32 81	
Refunds of previous year's expenditure		7,761 66	
Rents		158 17	
Sale of sundries		170 60	
			9,100 11
Indian Affairs—			
Collections		1,549 84	
Interest on trust funds		173 61	
Refunds from trust funds		5,960 85	
Refunds of previous year's expenditure		7,481 47	
Rents		2,468 83	
Sale of sundries		2,189 40	
			19,824 00
Insurance—			
Refunds of previous year's expenditure			113 70
Interior—			
Refund for goods lost in transit	25 00		
Refunds of previous year's expenditure	13,630 33		
Registration fees—Yukon	316 00		
Sale of sundries	27 00		
		13,998 33	
Less—Unclaimed estates—Yukon		1,752 25	
			12,246 08
Justice—			
Adjustment of judges' salaries		0 52	
Advertising in Canada law reports		1,177 00	
Penitentiaries—Sundry receipts		8,909 36	
Refund of costs reversed—Rex *vs.* Masson		103 85	
Refunds of previous year's expenditure		2,118 81	
Sale of Exchequer Court reports		87 92	
Sale of Supreme Court reports		11,173 00	
Sheriff fees—Dawson		75 00	
			23,645 46
Labour—			
Sale of publications		76 51	
Subscriptions to the Gazette		1,349 22	
			1,425 73
Carried forward			1,101,113 66

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1928—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			1,101,113 66
Marine and Fisheries—			
Marine Branch—			
Conscience money	30 00		
Examination of masters and mates	5,002 00		
Marine register	46 75		
Pilots' license fees	90 00		
Quit claims of water lots	101 00		
Radio revenue	64,218 60		
Refunds for damage done	295 45		
Refunds of previous year's expenditure	52,979 93		
Rent of equipment	1,552 70		
Other rents	11,668 76		
Sale of publications	4,000 41		
Sale of sundries	27,997 88		
Signal station dues	1,110 00		
Sundry fees	33 00		
Wireless apparatus and officers fees	250,173 80		
		419,300 28	
Fisheries Branch—			
Fish culture	196 55		
Lists of names furnished	90 59		
Modus vivendi licenses	186 00		
Pelagic sealing	95,014 07		
Refunds of previous year's expenditure	7,417 79		
Rents	319 00		
Sale of sundries	1,036 71		
Unused ticket	13 00		
		104,273 71	
			523,573 99
Mines—			
Assay and mineral examination fees		58 45	
Explosive permits		648 25	
Profit on sale of bullion to Royal Mint		652 43	
Refunds of previous year's expenditure		432 32	
Sale of publications		2,804 08	
Sale of sundries		391 50	
			4,987 03
National Defence—			
Bank interest	1,764 45		
Barrack damages	106 09		
Commission on telephones	25 47		
Printing maps	916 04		
Privileges granted	388 00		
Purchase of discharges	13,913 03		
Refunds of previous year's expenditure	9,794 31		
Rent of stores and equipment	9,532 22		
Other rents	14,174 53		
Sale of Government property	17,466 26		
Sale of movables	51,582 14		
Sale of sundries	100 00		
Wireless stations	24,503 58		
		144,266 12	
Air Service—			
Air harbour licenses	125 00		
Air transportation	704 00		
Air worthiness	385 00		
Breakage deposit	9 73		
Private pilots' license fees	10 00		
Registration fees	370 00		
Sale of photographs	3,369 95		
		4,973 68	
			149,239 80
Carried forward			1,778,914 48

Appendix No. 14—Continued

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1928—*Continued*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			1,778,914 48
National Revenue—			
Customs and Excise—			
Bonded factory and warehouse fees	77,134 87		
Bribe money	10 00		
Brokers' licenses	1,800 00		
Cartage	43,154 49		
Certified copies	903 50		
Commission on telephones	4 49		
Conscience money	611 96		
Excess cash on hand	53 00		
Extra services	171,993 81		
Interest on arrears of sales tax	30 00		
Interest on tourist's deposit	3 90		
Labels	52,019 61		
Landing certificates	60		
Law stamps	12,170 45		
Outstanding cheques	881 78		
Over-remittance	10		
Refunds of previous year's expenditure	12,902 27		
Rents	159 75		
Replaced stamps	52 24		
Sale of sundries	2,218 66		
Sale of unclaimed goods	3,136 91		
Storage charges	41,153 89		
Tobacco stamping	254 80		
Unclaimed bonds	260 44		
		420,911 52	
Taxation Branch—			
Law costs—Income tax	7,953 49		
Refunds of previous year's expenditure	169 38		
Sale of waste paper	314 83		
Unclaimed refunds of income tax	954 20		
		9,391 90	
			430,303 42
Post Office—			
Refunds of previous year's expenditure			3,624 49
Printing and Stationery—			
Profits on stationery for the year		18,553 82	
Sale of publications		60,175 22	
Sale of waste paper		15,800 30	
Surplus for the year—Printing branch		36,065 32	
			130,594 66
Public Works—			
Commission on telephones		3,722 64	
Conscience money		15 00	
Earnings of dredges and plants		8,258 15	
Electric current supplied		151 45	
Payment on claim King *vs.* Burgess		5 00	
Privileges granted		1 00	
Refund for damage done		105 05	
Refunds of previous year's expenditure		5,546 71	
Rent of equipment		964 46	
Other rents		83,532 51	
Sale of blue prints, photo work, etc		5,099 12	
Sale of movables		18,294 74	
Sale of real estate		65,059 04	
Sale of sundries		486 55	
Unclaimed retirement fund cheque		42	
Water collections		129 46	
			191,371 30
Carried forward			2,534,808 35

Appendix No. 14—Concluded

STATEMENT of Casual Revenue paid to the Receiver General for the fiscal year ended March 31, 1928—*Concluded*

From Whom Received and Nature of Receipts	$ cts.	$ cts.	$ cts.
Brought forward			2,534,808 35
Railways and Canals—			
Commission on telephones		27 40	
Electric current supplied		5 00	
Interest earned		23 55	
Interest on railway subsidies		147,493 87	
Labour and material supplied		15 50	
Refund for damage done		7,721 09	
Refund for work done		15 39	
Refunds of previous year's expenditure		10,143 94	
Rent of equipment		3,766 63	
Revenue from passing steamships through canals after they have been officially closed		66 54	
Sale of sundries, including empties		3,534 04	
Sale of publications		362 06	
			173,175 01
Royal Canadian Mounted Police—			
Refunds of previous year's expenditure			9,419 71
Secretary of State—			
Fees		698,922 31	
Less refunds		52,107 57	
			646,814 74
Senate—			
Certified copies		849 45	
Private bills	33,509 44		
Less refunds	3,348 82		
		30,160 62	
			31,010 07
Soldiers' Civil Re-establishment—			
Conscience money	2 00		
Refunds of previous year's expenditure	180,608 07		
		180,610 07	
Pensions Commission—			
Refunds of previous year's expenditure		26,741 51	
			207,351 58
Soldier Settlement Board—			
Refunds of previous year's expenditure		117 19	
Rentals		369 30	
			486 49
Trade and Commerce—			
Bank interest		49 16	
Certificate fees		144 37	
Commercial intelligence service		2,028 82	
Interest coupons on rent bonds		2 80	
Refund for lost articles		3 00	
Refunds of previous year's expenditure		1,672 90	
Rentals		485 39	
Revenue from motion picture bureau		17,912 26	
Sale of publications		31 64	
Sale of sundries		839 84	
			23,170 18
			3,626,236 13

Appendix No. 15

STATEMENT of Fines and Forfeitures, including Seizures, for the fiscal year ended March 31, 1928

From Whom Received and Nature of Receipts		$ cts.	$ cts.	$ cts.
Agriculture—				
Animal Contagious Diseases Act			972 00	
Dairy Industry Act			4,165 11	
Fruit Act			153 00	
Live Stock Act			4,684 36	
Seed Act			357 60	
				10,332 07
Finance—				
Contractors' securities forfeited			525 00	
Penalty—Sections 149 and 150, Bank Act			100 00	
				625 00
Health—				
Food and Drug Act—penalties			6,812 55	
Opium and Narcotic Drug Act—penalties			3,643 20	
Patent Medicine Act—penalties			50 00	
				10,505 75
Immigration and Colonization—				
Immigration Acts			72,542 19	
Chinese Immigration Act			3,500 00	
				76,042 19
Insurance—				
Loan Companies Act				500 00
Interior—				
Forestry Reserve Act			162 45	
Migratory Birds Act			922 00	
Northwest Game Act			100 00	
Northwest Territories Act			563 00	
Park regulations			1,875 53	
				3,622 98
Justice—				
Police Magistrate, Arnprior, Ont			15 00	
Police Magistrate, Dawson, Y.T			52 00	
Police Magistrate, Moncton, N.B			119 39	
Police Magistrate, Riviere du Loup, Que			1 00	
				187 39
Labour—				
Combines Investigation Act				23,810 89
Marine and Fisheries—				
Marine Acts			4,225 25	
Fisheries Acts			11,423 36	
				15,648 61
Mines—				
Explosives Act				205 00
National Defence—				
Air Board Acts			700 00	
Militia Acts			15 00	
Fine for purchasing stolen militia stores			40 00	
Fine under the Criminal Code, Halifax, N.S			20 00	
				775 00
National Revenue—				
Customs and Excise—				
Customs seizures	$ 799,941 65			
Excise seizures	181,275 60			
	981,217 25			
Less refunds of seizures	605,741 04			
		375,476 21		
Seizures generally		7,985 81		
Deposits forfeited—tourists		50 00		
Deposits forfeited—on perishable goods		10 00		
Excise War Tax Act		10,571 23		
			394,093 25	
Carried forward			394,093 25	142,254 88

Appendix No. 15—Concluded

STATEMENT of Fines and Forfeitures, including Seizures, for the fiscal year ended March 31, 1928—*Concluded*

From Whom Received and Nature of Receipts		$ cts.	$ cts.	$ cts.
Brought forward			394,093 25	142,254 88
National Revenue—				
Taxation Branch—				
Income Tax Act		18,853 17		
Penalty T. 3-4-5	11,097 76			
Less—refunds of penalties	200 24			
		10,897 52		
			29,750 69	423,843 94
Post Office—				
Post Office Acts				1,013 97
Public Works—				
Forfeiture for non-completion of contract				700 00
Railways and Canals—				
Railway Acts			7 00	
Canal Regulations			20 00	
				27 00
Trade and Commerce—				
Census Act			20 00	
Electric Light and Gas Act			20 00	
Gold and Silver Marking Act			50 00	
Statistical regulations			40 00	
Weights and Measures Act			170 00	
				300 00
				568,139 79

Appendix No. 16

Premium, Discount and Exchange—Revenue

From what source received	Rate	Amount	Amount of Revenue	Total
			$ cts.	$ cts.
Premium, etc., on sundry items—				
Finance—Canadian Government Merchant Marine				12 19
Immigration and Colonization				25 46
Marine and Fisheries—Fisheries Branch				14 25
National Defence				1 20
National Revenue			3 09	
" " Income Tax Branch			18 45	
				21 54
Soldiers' Civil Re-establishment				1 19
Soldier Settlement Board				393 26
Trade and Commerce				1 80
		£ s. d.		
Discount on Sterling Exchange Purchased	4·84 7/8	200,000 0 0	3,583 33	
	4·84 15/16	200,000 0 0	3,458 33	
	4·85	200,000 0 0	3,333 33	
	4·85 1/4	400,000 0 0	5,666 66	
	4·85 1/2	105,626 5 0	1,232 31	
	4·8665	300,000 0 0	50 00	
				17,323 96
Discount on Stock purchased for Sinking Funds	69 3/4	94,500 0 0	139,119 74	
	70 1/4	200 0 0	289 57	
	80 1/2	42,369 19 11	40,209 13	
	80 7/8	46,200 0 0	43,000 65	
	81	35,086 12 0	32,443 41	
	81 1/8	89,462 17 10	82,179 11	
	81 1/4	1,500 0 0	1,368 75	
	81 3/8	8,756 11 6	7,937 11	
	81 1/2	4,000 0 0	3,577 00	
	81 7/8	10,500 0 0	9,261 87	
	82 1/8	20,650 0 0	17,963 78	
	82 3/16	21,500 0 0	18,637 81	
	82 1/16	250 0 0	210 62	
	82 1/4	5,804 1 1	5,013 74	
	82 1/2	25,400 0 0	21,632 33	
	83 7/8	3,500 0 0	2,746 62	
	84 1/4	21,000 0 0	16,096 50	
	84 3/8	2,000 0 0	1,520 83	
	84 5/8	13,100 0 0	9,802 07	
	84 3/4	24,700 0 0	18,331 52	
	85 1/2	4,200 0 0	2,963 80	
	85 9/16	2,000 0 0	1,405 25	
	85 5/8	1,000 0 0	699 58	
	85 3/4	1,373 2 7	952 27	
	85 7/8	19,225 13 0	13,216 04	
	86 1/8	5,000 0 0	3,376 25	
	86 1/4	2,100 0 0	1,405 25	
	90 5/8	2,300 0 0	1,049 37	
	91 1/16	10,000 0 0	4,349 58	
	91 1/8	20,000 0 0	8,395 00	
	91 1/4	59,241 13 3	24,506 30	
	91 5/8	1,000 0 0	407 58	
	92	8,310 2 3	3,235 40	
	92 1/8	850 0 0	325 76	
	92 1/4	58,463 19 2	22,050 67	
	92 3/8	10,500 0 0	3,896 37	
	92 1/2	18,900 0 0	4,927 50	
	92 5/8	5,200 0 0	1,866 37	
	92 3/4	7,725 0 0	2,725 64	
				573,096 14
		$ cts.	$ cts.	
Discount on New York Funds Purchased	1/128	500,000 00	39 06	
	5/64	500,000 00	78 12	
	7/128	1,000,000 00	546 87	
	3/64	300,000 00	234 37	
	7/64	500,000 00	546 86	
	1/8	1,500,000 00	1,875 00	
				3,320 28
				594,211 27

Appendix No. 17

Superannuation Revenue

—	Superannuation Fund No. 1	Superannuation Fund No. 2
	$ cts.	$ cts.
Agriculture	84 00	
Finance		46 20
House of Commons	54 71	127 40
Interior	1 80	
National Revenue	20 89	260 02
Patent and Copyright Office		94 50
Post Office	7 98	543 96
Secretary of State	3 00	
Trade and Commerce		23 33
Interest allowed on Fund No. 2		108,642 06
	172 38	109,737 47
Deduct—Payments to superannuated employees, Fund No. 2		41,864 00
	172 38	67,873 47

Appendix No. 18

Superannuation Fund No. 5 for year ended March 31, 1928

Department	Contributions	Less refunds	Net contributions	Transfers from Retirement Fund	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Agriculture	112,389 43	141 49	112,247 94	22,956 28	135,204 22
Archives	7,135 20	7 00	7,128 20	.....	7,128 20
Auditor General's Office	14,863 77	683 79	14,179 98	1,240 26	15,420 24
Civil Service Commission	8,394 56	5 50	8,389 06	936 22	9,325 28
External Affairs	4,283 78	.....	4,283 78	.....	4,283 78
Finance	17,152 45	10 70	17,141 75	2,515 58	19,657 33
Fisheries	20,866 97	8 11	20,858 86	5,978 91	26,837 77
Office of the Secretary to the Governor General	1,001 46	.....	1,001 46	6,213 27	7,214 73
Health	20,976 79	180 23	20,796 56	1,214 86	22,011 42
High Commissioner's Office	2,523 78	155 88	2,367 90	.....	2,367 90
House of Commons	11,197 33	.....	11,197 33	10,393 15	21,590 48
Immigration and Colonization	64,409 56	82 59	64,326 97	13,850 17	78,177 14
Indian Affairs	31,521 70	132 92	31,388 78	8,560 72	39,949 50
Insurance	4,518 04	.....	4,513 04	231 57	4,749 61
Interior	205,141 02	167 90	204,973 12	53,946 43	258,919 55
Justice	27,619 22	8 53	27,610 69	.....	27,610 69
Labour	9,294 73	.....	9,294 73	3,315 15	12,609 88
Library of Parliament	1,557 39	.....	1,557 39	.....	1,557 39
Marine	119,415 87	10,403 70	109,012 17	14,027 93	123,040 10
Mines	30,887 58	397 00	30,490 58	3,474 58	33,965 16
National Defence	56,151 07	295 80	55,855 27	5,039 06	60,894 33
National Revenue	322,671 92	3,220 95	319,450 97	58,168 91	377,619 88
Income Tax	71,357 24	63 01	71,294 23	.....	71,294 23
Patent and Copyright Office	7,028 52	.....	7,028 52	.....	7,028 52
Board of Pension Commissioners	4,768 57	.....	4,768 57	620 80	5,389 37
Post Office	519,203 10	2,550 38	516,652 72	182,091 11	698,743 83
Printing and Stationery	33,380 69	.....	33,380 69	474 19	33,854 88
Privy Council	1,654 41	.....	1,654 41	.....	1,654 41
Public Works	131,897 43	360 66	131,536 77	2,365 95	133,902 72
Railways and Canals	57,834 40	27 91	57,806 49	11,584 54	69,391 03
Royal Canadian Mounted Police	4,937 71	10 08	4,927 63	.....	4,927 63
Secretary of State	4,543 47	4 75	4,538 72	1,475 23	6,013 95
Senate	3,319 54	.....	3,319 54	.....	3,319 54
Soldiers' Civil Re-establishment	14,053 72	.....	14,053 72	.....	14,053 72
Soldier Settlement Board	1,296 60	128 35	1,168 25	.....	1,168 25
Trade and Commerce	85,632 70	96 71	85,535 99	11,043 82	96,579 81
	2,034,881 72	19,143 94	2,015 737 78	421,718 69	2,437,456 47

	Dr.	Cr.
	$ cts.	$ cts.
By Balance March 31, 1927	.....	15,854,854 64
By Contributions less refunds	.....	2,015,737 78
By Contributions recovered from retired employees	.....	12,582 58
By Retirement Fund transferred	.....	421,718 69
By Interest at 4% to March 31, 1928	.....	666,960 67
By Transfer from Consolidated Fund	.....	1,402,210 32
To Annuities paid to March 31, 1928	386,135 15	
To Gratuities paid to March 31, 1928	44,850 26	
To Withdrawal Allowances paid to March 31, 1928	61,377 31	
To Balance transferred to fiscal year 1928-29	19,881,701 96	
	20,374,064 68	20,374,064 68
By Balance March 31, 1928	.....	19,881,701 96

Appendix No. 19

STATEMENT showing the Loans authorized, amounts issued and redeemed, and the balance negotiable under the several acts of Parliament on March 31, 1928.

—	Dr.	$ cts.	—	Cr.	$ cts.
1927 April 1	To Balance.....	176,820,104 04			
	To payments over receipts in Savings Bank.....	818,266 53	1928 Mar. 31	By Balance negotiable....	177,638,370 57
		177,638,370 57			177,638,370 57
1928 April 1	To Balance negotiable.....	177,638,370 57			

Appendix No. 20

Number and Total Salaries of Officials under the Superannuation Acts and Retirement Act on March 31, 1928

Department	No. of Officials, Superannuation Fund No. 1	No. of Officials, Superannuation Fund No. 2	No. of Officials, Superannuation Fund No. 5	No. of Officials, Retirement Fund	Total Number of Officials	Annual Salaries Superannuation Fund No. 1	Annual Salaries Superannuation Fund No. 2	Annual Salaries Superannuation Fund No. 5	Annual Salaries Retirement Fund	Total Annual Salaries	Total Annual Salaries by Departments
						$	$	$	$	$	$
Agriculture—Inside	1		281	117	399	2,800 00		557,680 00	201,080 00	761,560 00	
Outside			733	424	1,157			1,404,669 96	861,679 92	2,266,349 88	3,027,909 88
Archives—Inside			38	3	41			90,640 00	3,840 00	94,480 00	
Outside			19	4	23			32,340 00	6,000 00	38,340 00	132,820 00
Auditor General's Office	1		143	30	174	2,800 00		296,740 00	40,300 00	339,840 00	339,840 00
Civil Service Commission			78	35	113			152,320 00	56,380 00	208,700 00	208,700 00
External Affairs	1		39	3	43	5,220 00		79,320 00	4,800 00	89,340 00	89,340 00
Finance—Inside	1	1	159	115	276	4,140 00	1,440 00	269,490 00	129,240 00	404,310 00	
Outside	1		43	5	49	3,060 00		75,920 00	8,580 00	87,560 00	491,870 00
Office of the Secretary to the Governor General			10		10			20,030 00		20,030 00	20,030 00
Health—Inside			67	14	81			146,200 00	26,160 00	172,360 00	
Outside	1		100	15	116	1,980 00		214,560 00	26,895 00	243,435 00	415,795 00
High Commissioner's Office	1		21	1	23	4,320 00		34,800 00	7,000 00	46,120 00	46,120 00
House of Commons	1	1	72	10	84	4,000 00	2,800 00	215,340 00	25,940 00	248,080 00	248,080 00
Immigration and Colonization—Inside			125	29	154			228,740 00	43,740 00	272,480 00	
Outside			399	85	484			718,320 00	145,670 00	863,990 00	1,136,470 00
Indian Affairs—Inside	2		67	5	74	4,320 00		148,311 19	6,405 00	159,636 19	
Outside			151	151	302			250,000 00	138,975 00	388,975 00	548,611 19
Insurance	1		29	3	33	4,620 00		79,960 00	4,080 00	88,660 00	88,660 00
Interior—Inside	4		996	192	1,192	12,240 00		2,181,369 00	309,363 00	2,502,972 00	
Outside			555	146	701			1,069,542 00	261,477 00	1,331,019 00	3,833,991 00
Justice—Inside	2		81	15	98	5,700 00		197,060 00	29,720 00	232,480 00	
Outside			211	1	212			288,020 47	3,540 00	291,560 47	524,040 47
Labour—Inside			89	15	104			174,700 00	25,200 00	199,900 00	
Outside			1		1			5,000 00		5,000 00	204,900 00
Library of Parliament			14	2	16			35,685 00	7,300 00	42,985 00	42,985 00
Marine and Fisheries—Inside			183	36	219			421,440 00	52,560 00	474,000 00	
Outside			955	132	1,087			1,581,432 00	174,799 60	1,756,231 60	2,230,231 60
Mines—Inside			232	48	280			566,660 00	94,395 26	661,055 26	
Outside			13	1	14			30,120 00	2,880 00	33,000 00	694,055 26

Appendix No. 20—Concluded

Number and Total Salaries of Officials under the Superannuation Acts and Retirement Act on March 31, 1928—*Concluded*

Department	No. of Officials, Superannuation Fund No. 1	No. of Officials, Superannuation Fund No. 2	No. of Officials, Superannuation Fund No. 5	No. of Officials, Retirement Fund	Total Number of Officials	Annual Salaries Superannuation Fund No. 1	Annual Salaries Superannuation Fund No. 2	Annual Salaries Superannuation Fund No. 5	Annual Salaries Retirement Fund	Total Annual Salaries	Total Annual Salaries by Departments
						$	$	$	$	$	$
National Defence—Inside			309	78	387			583,621 75	109,040 00	692,661 75	
Outside			188	35	223			322,883 75	54,362 00	377,245 75	1,069,907 50
National Revenue—Inside		1	266	44	311		2,280 00	524,060 00	72,300 00	598,640 00	
Outside	16	8	3,597	628	4,249	32,970 00	14,390 00	6,592,006 00	991,795 00	7,631,161 00	8,229,801 00
Patent and Copyright Office		1	73	18	92		2,700 00	131,929 31	22,455 00	157,084 31	157,084 31
Post Office—Inside	4	1	698	77	780	10,200 00	1,860 00	1,135,450 00	112,340 00	1,259,850 00	
Outside	17	10	6,135	3,196	9,358	39,660 00	18,300 00	10,054,246 00	5,027,341 00	15,139,547 00	16,399,397 00
Printing and Stationery			238	10	248			444,908 00	18,560 00	463,468 00	463,468 00
Privy Council			16		16			40,380 00		40,380 00	40,380 00
Public Works—Inside	1		270	25	296	4,620 00		595,870 00	40,500 00	640,990 00	
Outside			1,020	67	1,087			1,236,779 88	89,152 80	1,325,932 68	1,966,922 68
Railways and Canals—Inside		1	93	6	100		10,000 00	218,890 00	8,880 00	237,770 00	
Outside			378	72	450			666,491 00	95,115 00	761,606 00	999,376 00
Royal Canadian Mounted Police			42	3	45			85,660 00	4,020 00	89,680 00	89,680 00
Secretary of State			56	27	83			96,120 00	42,360 00	138,480 00	138,480 00
Senate	1		23	1	25	5,120 00		64,200 00	3,420 00	72,740 00	72,740 00
Soldiers' Civil Re-establishment—											
Inside			118	11	129			196,840 00	14,580 00	211,420 00	
Outside			10		10			21,060 00		21,060 00	232,480 00
Soldier Settlement Board			7	2	9			26,360 00	5,520 00	31,880 00	31,880 00
Trade and Commerce—Inside	1		221	69	291	3,000 00		403,497 25	97,592 47	504,089 72	
Outside	2		453	89	544	4,800 00		1,041,967 33	232,513 71	1,279,281 04	1,783,370 76
	59	24	20,115	6,095	26,293	156,170 00	53,770 00	36,049,629 89	9,739,846 76	45,999,416 65	45,999,416 65

Appendix No. 21

DECAYED PILOTS' FUND

In Account with the Dominion of Canada

1927		
April 1—Balance from March 31, 1927		$ 98,087 60
Receipts April 1, 1927 to March 31, 1928		14,767 62
Interest on Bonds—		
War Loan 1916–31,	$ 300 00	
War Loan 1917–37, 1 year	125 00	
Victory Loan 1917, 1 year	522 50	
Victory Loan 1919, 1 year	550 00	
Refunding Loan 1923, 1 year	800 00	
Province of Ontario 5% Bonds, 1 year	1,200 00	
Province of Manitoba 6% Bonds, 1 year	360 00	
Province of Quebec 6% Bonds, 1 year	240 00	
Province of Quebec 4½% Bonds, 1 year	225 00	
Refunding Loan 1926, 1 year	270 00	
		$ 4,592 50
Interest on deposit with Government		398 90
		$ 117,846 62
Less Pensions to Pilots and Widows		12,000 00
		$ 105,846 62
Gain for year $7,759.02.		
1928		
Mar. 31—Cash on deposit with Government		$ 18,846 62
Bonds held by Government as under—		
5% War Loan 1916-31	$ 4,000 00	
5% War Loan 1917-37	2,500 00	
5% Refunding Loan 1923	16,000 00	
5½% Victory Loan 1917	9,500 00	
5½% Victory Loan 1919	10,000 00	
4½% Refunding Loan 1926	6,000 00	
5% Province of Ontario Bonds	24,000 00	
6% Province of Manitoba Bonds	6,000 00	
4½% Province of Quebec Bonds	5,000 00	
6% Province of Quebec Bonds	4,000 00	
		$ 87,000 00
		$ 105,846 62

Appendix No. 22

HALIFAX PILOTS' FUND

In Account with the Dominion of Canada

1927		
April 1—Balance from March 31, 1927		$ 70,133 65
Receipts from April 1, 1927 to March 31, 1928		5,360 55
Interest on Bonds—		
Victory Loan 1917, 1 year	$ 2,200 00	
Victory Loan 1919, 1 year	550 00	
Refunding Loan 1924, 1 year	157 50	
Refunding Loan 1926	382 50	
Dominion of Canada Stock 1930-50, 1 year	109 02	
		3,399 02
Discount on $5,000 Refunding Loan 1926 Bonds purchased at 99.50		25 00
Interest on deposit with Government		170 38
		$ 79,088 60
Less Pensions to Pilots and Widows	$ 3,149 84	
Less Interest on $5,000, 1926 Refunding Loan Bonds purchased, 14 days at 4½%	8 63	
		3,158 47
		$ 75,930 13
Gain for year $5,796.48.		
1928		
Mar. 31—Cash on deposit with Government		$ 7,536 80
Bonds and stock held by Government as under—		
5½% Victory Loan 1917	$ 40,000 00	
5½% Victory Loan 1919	10,000 00	
4½% Refunding Loan 1924	3,500 00	
4½% Refunding Loan 1926	11,000 00	
3½% 1930-50 Dominion of Canada Stock	3,893 33	
		68,393 33
		$ 75,930 13

Appendix No. 23

ST. JOHN PILOTS' PENSION FUND

In Account with the Dominion of Canada

1927			
April 1—Balance from March 31, 1927			$ 39,663 28
Receipts from April 1, 1927 to March 31, 1928			6,171 81
Interest on Bonds—			
War Loan 1916–31	$	75 00	
War Loan 1917–37, 1 year		50 00	
Victory Loan 1919, 1 year		330 00	
Refunding Loan 1924, 1 year		247 50	
Refunding Loan 1926		337 50	
Province of New Brunswick Bonds, 1 year		852 50	
			1,892 50
Discount on $5,000 Refunding Loan 1926 Bonds at 99.50			25 00
Interest on deposit with Government			67 46
			$ 47,820 05
Less Pensions to Pilots and Widows, 1926	$	6,165 10	
Less Interest on $5,000, Refunding Loan Bonds purchased, 14 days at 4½%		8 63	
			6,173 73
			$ 41,646 32
Gain for year $1,975.58.			
1928			
Mar. 31—Cash on deposit with Government			$ 2,646 32
Bonds held by Government as under—			
5% War Loan 1916–31	$	1,000 00	
5% War Loan 1917–37		1,000 00	
5½% Victory Loan 1919		6,000 00	
4½% Refunding Loan 1924		5,500 00	
4½% Refunding Loan 1926		10,000 00	
5½% Province of New Brunswick Bonds		15,500 00	
			39,000 00
			$ 41,646 32

Appendix No. 24

SYDNEY PILOTS' PENSION FUND

In Account with the Dominion of Canada

1927			
April 1—Balance from March 31, 1927			$ 28,988 24
Receipts from April 1, 1927 to March 31, 1928			8,096 85
Interest on Bonds—			
War Loan 1916–31	$	75 00	
Victory Loan 1917, 1 year		110 00	
Victory Loan 1918, 1 year		110 00	
Victory Loan 1919, 1 year		429 00	
Refunding Loan 1925, 1 year		135 00	
Refunding Loan 1926		337 50	
			1,196 50
Discount on $9,000, Refunding Loan 1926 Bonds, purchased at 99.50			45 00
Interest on deposit with Government			212 10
			$ 38,538 69
Less Pensions to Pilots and Widows	$	4,024 98	
Less Interest on $9,000, Refunding Loan 1926 Bonds purchased, 14 days at 4½%		15 53	
			4,040 51
			$ 34,498 18
Gain for year $5,509.94.			
1928			
Mar. 31—Cash on deposit with Government			$ 8,698 18
Bonds held by Government, as under—			
5% War Loan 1916–31	$	1,000 00	
5½% Victory Loan 1918		2,000 00	
5½% Victory Loan 1919		7,800 00	
4½% Refunding Loan 1925		3,000 00	
4½% Refunding Loan 1926		12,000 00	
			$ 25,800 00
			$ 34,498 18

Note—$2,000 Victory Loan 1917 Bonds redeemed December 1, 1927.

Appendix No. 25

THE CANADIAN NORTHERN RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £1,622,586 19s. 9d. guaranteed by the Dominion of Canada (Chapter 11, Acts of 1908)

—		Dr.	Cr.
		$ cts.	$ cts.
By proceeds of sale of £1,263,698 19s. 9d., or $6,150,000, 3½ per cent first mortgage debenture stock sold en bloc for	$ 6,000,000 00		
Less exchange at $4·862142 in transfer to Canada	5,577 08		
		.....	5,994,422 92
By proceeds of £358,888 3½ per cent first mortgage debenture stock sold in March, 1911, at a net price to the company of 92, £330,176 19s. 2d	$ 1,606,861 19		
Less exchange in transfer to Canada	4,326 51		
		.....	1,602,534 68
By interest accrued to Nov. 30, 1927, on deposits		.....	425,822 02
To amount of payments made to the company under sundry certificates from the Government Engineer		7,442,346 31	
To balance		580,433 31	
		8,022,779 62	8,022,779 62
March 31, 1928, By balance		.....	580,433 31

Appendix No. 26

THE CANADIAN NORTHERN RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of $45,000,000 guaranteed by the Dominion of Canada (Chapter 20, Acts of 1914)

—			Dr.	Cr.
			$ cts.	$ cts.
By advance made by Dominion Government, August to December, 1914, against pledge of $12,500,000 of 4 per cent bonds, advance being by issue of Dominion Notes at various times and subsequently confirmed by Legislation, Chap. 4-5, Geo. V, Acts of 1915			.....	10,000,000 00
By proceeds sale of £3,000,000 4 per cent bonds in July, 1914, at a net price to the company of 91½	£ 2,745,000 0 0	$13,359,000 00		
By profit on exchange in transfer to Canada		109,361 32		
			.....	13,468,361 32
By proceeds sale of £500,000 4 per cent bonds in February, 1915, at a price to the company of 91 plus accrued interest	£ 455,000 0 0			
Accrued interest	7,145 6 5			
	£ 462,145 6 5	$ 2,249,107 23		
To loss on exchange in transfer to Canada		8,279 55		
			.....	2,240,827 68
By advance made by Columbia Trust Co., New York, September, 1915, against pledge of $15,333,333.34, 4 per cent bonds, said bonds being pledged as security for the repayment of notes issued by the company, due September 1, 1917, for $11,500,000. These notes were sold on a 6 per cent basis less underwriting claims, the net proceeds being			.....	11,084,850 00
On September 1, 1917, when these notes came due to enable the company to take them up the Government advanced to the company $9,981,021.03 against security of $15,306,334 of the above 4 per cent bonds, the remaining bonds $27,000 were sold under the option given to holders of the notes at the price of 79 per cent, and the difference in proceeds, namely 6·7075% reverted to the credit of this account being		$ 1,811 03		
By gain on exchange from New York		33 95	.....	1,844 98
By interest accrued to Nov. 30, 1927			.....	330,019 24
To amount of payments made to the company under sundry Certificates from the Government Engineer			37,123,348 11	
To balance			2,555 11	
			37,125,903 22	37,125,903 22
March 31, 1928. By balance			.....	2,555 11

Appendix No. 27

THE CANADIAN NORTHERN ONTARIO RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £7,350,000 guaranteed by the Dominion of Canada (Chapter 6, Acts of 1911)

—			Dr.	Cr.
			$ cts.	$ cts.
Proceeds of £7,000,000 3½ per cent first mortgage debenture stock sold at a net price to the company of 90¾	£6,352,500 0 0	$30,915,500 00		
Less exchange in transfer to Canada		1,531 34	.....	30,913,968 66
By advance made by the Guaranty Trust Company of New York, July, 1913, on £293,837 first mortgage debenture stock pledged as security			.....	1,001,004 71
By proceeds of sale of £33,561 in July, 1914, of this stock at a net price of 88	£ 29,533 14 0			
By advance made by Lloyds Bank Ltd., London, on £22,602 of above stock pledged as security (£70 advanced July, 1914, for each £100 of pledged securities)	15,821 8 0			
	£ 45,355 2 0	$ 220,728 15		
By profit on exchange in transfer to Canada		188 84		
			.....	220,916 99
By interest accrued to Nov. 30, 1927, on deposits			.....	1,585,215 30
To amount of payments made to the company under sundry certificates from the Government Engineer			33,005,146 44	
To balance			715,959 22	
			33,721,105 66	33,721,105 66
March 31, 1928. By balance			.....	715,959 22

Appendix No. 28

THE CANADIAN NORTHERN ALBERTA RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £647,260 guaranteed by the Dominion of Canada (Chapter 6, Acts of 1910, as amended by Chapter 8, Acts of 1912)

—		Dr.	Cr.
		$ cts.	$ cts.
By proceeds of sale of £647,260 in October, 1911, 3½ per cent first mortgage debenture stock at a net price to the company of 92, £595,479 4 s. 0d	$ 2,897,998 77		
Less exchange in transfer to Canada	7,819 69	.....	2,890,179 08
By interest accrued to Nov. 30, 1927, on deposits		.....	84,382 31
To amount of payments made to the company under sundry certificates from the Government Engineer		2,952,897 03	
To balance		21,664 36	
		2,974,561 39	2,974,561 39
March 31, 1928. By balance		.....	21,664 36

Appendix No. 29

THE CANADIAN NORTHERN ALBERTA RAILWAY COMPANY

IN ACCOUNT WITH THE MINISTER OF FINANCE AND RECEIVER GENERAL OF CANADA

Authorized issue of £733,561 guaranteed by the Dominion of Canada (Chapter 7, Acts of 1912)

—		Dr.	Cr.
		$ cts.	$ cts.
By proceeds of £410,959 issue, 3½ per cent debenture stock sold in November, 1912, at a net price to the company of 90, £369,863 2s. 0d	$ 1,800,000 13		
Loss on transfer to Canada	0 13	.....	1,800,000 00
By advances made by the Canadian Bank of Commerce, July, 1913, on the pledging of $1,350,000 3½ per cent debenture stock ($70 advanced for each $100 pledged)		.....	945,000 00
By advances made by the Guaranty Trust Company of New York, July, 1913, on £45,206 3½ per cent debenture stock pledged as security		.....	154,001 77
By interest accrued to Nov. 30, 1927, on deposits		.....	43,641 18
To amount of payments made to the company under sundry certificates from the Government Engineer		2,927,440 00	
To balance		15,202 95	
		2,942,642 95	2,942,642 95
March 31, 1928. By balance		.....	15,202 95

Appendix No. 30

INDIAN TRUST FUND

SHOWING transactions in connection with the Fund during the year ended March 31, 1928.

Service	Debit	Credit
	$ cts.	$ cts.
Balance, March 31, 1927	.....	12,860,953 69
Collections on land sales, timber and stone dues, rents, fines and fees	.....	942,976 61
Interest for year ended March 31, 1928	.....	653,946 12
Legislative grants to supplement the funds	.....	7,000 00
Outstanding cheques, 1925-26	.....	99 76
Credit Transfers during the year	.....	519 50
Expenditure during the year	1,262,003 84	
Debit Transfers during the year	125 00	
Balance, March 31, 1928	13,203,366 84	
	14,465,495 68	14,465,495 68

Appendix No. 31

DOMINION NOTE CIRCULATION

Denomination	March 31, 1924	March 31, 1925	March 31, 1926	March 31, 1927	March 31, 1928
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
$ 1	16,491,335 00	16,294,009 00	16,943,453 50	17,428,020 50	18,100,000 50
2	12,051,572 50	11,617,597 50	12,231,463 50	12,609,981 50	13,039,459 50
4	34,915 00	34,259 00	33,547 00	33,071 00	32,635 00
5	2,975 625 00	1,959,850 00	428,672 50	700,147 50	294,072 50
50	150 00	650 00	650 00	650 00	650 00
500	2,022,000 00	1,826,000 00	1,790,500 00	1,736,000 00	1,791,500 00
1,000	4,209,000 00	3,306,000 00	3,344,000 00	4,103,000 00	4,244,000 00
1,000 Special	982,000 00	555,000 00	648,000 00	433,000 00	281,000 00
5,000 Special	96,840,000 00	24,240,000 00	16,600,000 00	9,950,000 00	7,810,000 00
50,000 Special	79,700,000 00	145,550,000 00	129,200,000 00	123,800,000 00	141,650,000 00
Fractional	1,290,715 30	1,301,036 43	1,335,494 19	1,346,145 19	1,360,548 58
Provincial	27,691 53	27,686 53	27,623 53	27,623 53	27,623 53
	216,625,004 33	206,712,088 46	182,583,404 22	172,167,639 22	188,631,489 61

Appendix No. 32

Dominion Notes Withdrawn from Circulation and Destroyed

Denominations	1923-24	1924-25	1925-26	1926-27	1927-28
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Fractionals	134,637 12	177,679 62	182,527 24	172,450 00	178,816 61
$1	18,146,925 50	19,187,105 00	21,994,944 50	20,405,023 00	21,725,052 00
$2	12,755,939 00	13,358,049 00	16,766,314 00	15,189,788 00	16,277,078 00
$4	1,032 00	744 00	712 00	476 00	436 00
$5	1,576,330 00	1,777,075 00	1,373,727 50	601,850 00	376,735 00
$50	3,600 00	400 00	.....	.....	.....
Provincials	18 72	5 00	63 00	.....	.....
$500	518,000 00	995,500 00	15,063,000 00	1,761,000 00	1,009,000 00
$1,000	745,000 00	1,241,000 00	10,573,000 00	14,852,000 00	2,624,000 00
$500 Special	2,000 00	1,000 00	.....	.....	.....
$1,000 Special	2,877,000 00	21,954,000 00	271,000 00	354,000 00	264,000 00
$5,000 Special	235,900,000 00	116,475,000 00	1,930,000 00	3,720,000 00	7,330,000 00
$50,000 Special	74,400,000 00	299,400,000 00	3,800,000 00	17,100,000 00	8,600,000 00
Total	347,060,482 34	474,567,557 62	71,955,288 24	74,157,487 00	58,385,117 61

Appendix No. 33

Dominion Notes Issued and Redeemed and in Circulation

Fiscal Year	Notes in circulation April 1	Notes held by Asst. Rec's General April 1	New Notes Issued during year	Notes Withdrawn and destroyed during year	Notes held by Asst. Rec's General March 31, 1928	Notes in circulation March 31, 1928
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1912–13	113,443,633 40	28,406,318 75	39,949,522 50	33,648,544 00		
1913–14	112,101,885 65	35,849,045 00	44,870,977 50	34,950,615 87		
1914–15	117,795,638 53	40,075,653 75	59,054,750 00	28,243,244 62		
1915–16	157,056,118 91	31,626,678 75	55,597,250 00	25,917,736 12		
1916–17	177,943,131 54	40,284,180 00	35,370,750 00	29,468,918 75		
1917–18	183,248,986 79	40,880,156 00	152,019,000 00	32,802,120 87		
1918–19	250,798,860 92	92,547,161 00	99,791,250 00	33,345,420 25		
1919–20	298,058,697 67	111,733,154 00	45,138,500 00	39,743,428 25		
1920–21	311,032,791 92	103,254,131 50	98,964,000 00	44,957,879 50		
1921–22	277,882,884 92	191,310,159 00	34,420,500 00	44,963,245 50		
1922–23	241,461,426 42	217,188,872 00	51,144,550 00	44,502,764 00		
1923–24	242,657,765 42	222,634,319 00	462,654,950 00	347,060,482 34		
1924–25	216,625,004 33	364,261,547 75	373,319,000 00	474,567,557 62		
1925–26	206,712,088 46	272,925,906 00	65,196,500 00	71,955,288 24		
1926–27	182,583,404 22	290,295,802 00	71,558,500 00	74,157,487 00		
1927–28	172,167,639 22	298,112,580 00	45,578,500 00	58,385,117 61	268,842,112 00	188,631,489 61

Appendix No. 34

Silver Recoinage Statement

	Amount withdrawn for recoinage face value	Amount withdrawn for recoinage net value	Amount recoined face value	Loss on recoinage	Gain on recoinage
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
April 30, 1914	997,735 21	988,691 57	928,539 00	60,152 57	.....
March 31, 1915	106,015 65	104,132 63	96,893 15	7,239 48	.....
March 31, 1916	156,830 00	154,243 85	143,354 10	10,889 75	.....
March 31, 1917	93,687 15	92,093 28	85,506 45	6,586 83	.....
March 31, 1918	79,205 65	77,817 03	72,131 20	5,685 83	.....
March 31, 1919	66,679 80	65,540 75	60,516 50	5,024 25	.....
March 31, 1920	58,896 35	58,134 99	57,641 00	493 99	.....
March 31, 1921	68,083 05	67,246 05	71,584 45	.....	4,338 40
March 31, 1922	273,588 05	272,614 31	133,784 15	.....	8,360 39
March 31, 1923	177,786 95	176,733 26	.....	.....	.....
March 31, 1924	148,502 35	146,538 74	.....	.....	.....
March 31, 1925	135,044 05	133,806 96	.....	.....	.....
March 31, 1926	279,057 60	277,124 80	.....	.....	.....
March 31, 1927	716,407 45	713,592 41	.....	.....	.....
March 31, 1928	524,757 65	522,001 46	117,024 00	.....	11,127 76
	3,882,276 96	3,850,312 09	1,766,974 00	96,072 70	23,826 55

Balance held for Recoinage, net value, March 31, 1928: $2,011,091.94.

Appendix No. 35

Copper Recoinage Statement

	Amount withdrawn for recoinage face value	Amount withdrawn for recoinage net value	Amount recoined face value	Loss on recoinage	Gain on recoinage
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
March 31, 1914	321 49	284 64	272 31	12 33	.....
March 31, 1915	46 50	36 23	43 78	.....	7 55
March 31, 1916	54 43	41 02	51 53	.....	10 51
March 31, 1917	75 56	58 67	72 04	.....	13 37
March 31, 1918	62 84	47 38	59 50	.....	12 12
March 31, 1919	89 02	68 22	83 82	.....	15 60
March 31, 1920	123 96	96 17	118 94	.....	22 77
March 31, 1921	157 27	124 49	262 43	.....	137 94
March 31, 1922	464 88	359 87	.....	.....	.....
March 31, 1923	347 79	286 71	1,088 50	.....	577 68
March 31, 1924	378 77	301 01	532 18	.....	264 93
March 31, 1925	311 29	250 16	595 98	.....	302 48
March 31, 1926	517 73	415 60	853 34	.....	433 37
March 31, 1927	5,403 12	5,289 13	7,863 46	.....	3,388 07
March 31, 1928	744 99	618 14	1,922 66	.....	851 62
	9,099 64	8,277 44	13,820 47	12 33	6,038 01

Balance held for Recoinage, net value, March 31, 1928: $482.65.

Appendix No. 36

Dominion Notes Issued to Assistant Receivers General

Denominations	1923—24	1924—25	1925—26	1926—27	1927—28
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Fractional	144,450 00	185,000 00	227,500 00	177,500 00	192,500 00
$1	18,796,000 00	20,124,000 00	22,480,000 00	21,888,000 00	21,760,000 00
$2	13,112,000 00	13,960,000 00	17,424,000 00	15,728,000 00	16,576,000 00
$5	7,510,000 00	5,120,000 00	.....	40,000 00	.....
$500	477,500 00	520,000 00	14,595,000 00	1,875,000 00	1,200,000 00
$1,000	675,000 00	500,000 00	10,420,000 00	15,950,000 00	2,800,000 00
$1,000 Special	2,440,000 00	21,500,000 00	.....	250,000,00	800,000 00
$5,000 "	104,500,000 00	26,410,000 00	50,000 00	15,650,000 00	2,250,000 00
$50,000 "	315,000,000 00	285,000,000 00	.....	.....	.....
Total	462,654,950 00	373,319,000 00	65,196,500 00	71,558,500 00	45,578,500 00

Appendix No. 37

Statement showing One and Two Dollar Dominion Notes in Circulation—Total amount of Dominion Notes and Bank Notes in Circulation and amount of Gold held by the Receiver General, March 31, 1882, to March 31, 1928.

Year	One and Two Dollar Notes in Circulation	Total Dominion Notes in Circulation	Bank Notes in Circulation	Gold held by the Receiver General*
	$ cts.	$ cts.	$ cts.	$ cts.
1882	5,675,413 00	14,315,437 77	32,947,260 04	2,149,461 92
1883	5,809,538 00	15,801,769 98	34,517,813 52	2,381,288 51
1884	5,427,385 00	16,901,296 46	30,197,882 51	2,548,794 52
1885	5,290,655 00	15,600,166 86	29,791,262 85	2,345,525 44
1886	5,195,631 00	16,858,838 28	29,959,916 55	4,060,046 84
1887	5,761,588 00	14,781,270 78	31,521,420 43	2,516,972 36
1888	5,933,659 00	15,931,679 11	31,985,285 27	3,452,022 09
1889	5,852,398 00	15,110,965 33	32,471,522 09	3,925,994 19
1890	5,974,395 00	15,228,780 65	31,704,281 61	3,017,109 53
1891	6,262,728 00	16,156,465 48	33,020,661 30	3,789,704 21
1892	6,211,976 00	16,213,525 76	32,483,965 00	3,728,463 36
1893	6,526,193 00	17,587,711 66	33,430,883 00	5,550,381 36
1894	6,362,517 00	19,548,102 45	30,702,607 00	7,624,381 36
1895	6,339,098 00	20,946,237 12	29,414,796 00	9,175,245 43
1896	6,606,214 00	18,791,747 62	30,789,457 00	7,049,897 33
1897	6,711,754 00	21,987,613 26	31,082,521 00	10,380,205 37
1898	7,306,574 00	21,142,624 76	35,930,085 00	9,779,170 97
1899	7,902,076 00	22,933,078 39	38,409,227 00	11,768,191 25
1900	8,599,618 00	24,452,442 52	43,814,918 00	10,829,263 02
1901	9,136,829 00	28,498,519 52	47,611,967 00	15,159,309 02
1902	9,546,552 00	29,868,112 05	52,442,982 00	15,939,396 55
1903	10,671,569 00	33,777,733 58	58,283,484 00	20,702,144 08
1904	11,241,646 00	39,777,381 33	59,760,119 00	27,377,814 83
1905	11,616,702 00	47,839,250 33	58,721,173 00	35,813,970 43
1906	12,697,203 00	47,201,260 22	65,991,818 00	32,617,209 02
1907	14,427,814 00	54,794,596 86	76,346,013 00	37,619,596 81
1908	14,119,524 00	60,455,991 36	69,047,892 00	41,689,751 31
1909	14,215,537 00	79,351,080 50	68,708,458 00	61,581,665 45
1910	15,728,269 00	87,134,068 50	78,265,822 00	69,736,110 85
1911	17,155,996 00	89,994,270 25	81,938,753 00	74,159,771 40
1912	19,356,015 00	113,443,633 40	95,918,404 00	98,802,395 14
1913	20,783,997 00	112,101,885 65	102,202,047 00	98,507,112 81
1914	20,605,876 00	117,795,638 53	96,848,384 00	101,161,366 18
1915	20,236,008 50	157,056,118 91	96,666,544 00	94,644,423 44
1916	21,927,267 50	177,943,131 54	114,804,604 00	120,931,622 98
1917	24,041,642 50	183,248,986 79	148,265,140 00	118,561,338 50
1918	25,771,009 50	250,798,860 92	191,058,404 00	119,941,748 92
1919	27,378,740 00	298,058,697 67	214,576,870 00	121,141,122 07
1920	29,789,653 00	311,932,791 92	225,769,628 00	104,399,455 48
1921	29,275,112 00	277,882,884 92	206,094,668 00	83,381,036 53
1922	26,722,658 50	241,461,426 42	162,651,367 00	84,249,497 86
1923	27,775,672 00	242,657,765 42	173,258,362 00	128,740,130 31
1924	28,542,907 50	216,625,004 33	170,850,556 00	102,230,239 56
1925	27,911,606 50	206,712,088 46	157,888,900 00	122,811,151 12
1926	29,174,917 00	182,583,404 22	163,952,235 00	98,418,636 91
1927	30,038,002 00	172,167,639 22	163,807,355 00	100,885,942 92
1928	31,139,460 00	188,631,489 61	176,805,067 00	96,024,272 28

*Includes amount held as reserve against Savings Bank Deposits.

Appendix No. 38

STATEMENT showing Amount of Canadian Gold Coin issued by Mint to March 31, 1928

—	March 31, 1913	March 31, 1914	March 31, 1915	March 31, 1916	Total
	$	$	$	$	$
Montreal	185,000	45,000	.....	.....	230,000
Toronto	280,000	.....	.....	.....	280,000
Halifax	32,500	.....	.....	.....	32,500
St. John, N.B.	37,500	.....	.....	.....	37,500
Charlottetown	8,000	.....	.....	.....	8,000
Winnipeg	125,000	.....	.....	.....	125,000
Victoria	162,500	.....	.....	.....	162,500
Ottawa	898,325	2,151,410	897,170	535	3,947,440
By Mint	3,885	1,070	40,525	.....	45,480
	1,732,710	2,197,480	937,695	535	4,868,420

$ 5	1,388,060
$10	3,480,360
	4,868,420

NOTE.—First coin issued May 10, 1912.

NO CANADIAN GOLD COIN ISSUED SINCE 1916

Appendix No. 39

COINAGE (in dollar and cent denomination) executed at the Royal Mint, London, and the Mint, Birmingham, for Canada, during the years 1858 to 1907; also coinage struck for New Brunswick and Nova Scotia before Confederation in 1867, and for Prince Edward Island before 1873, when that Province entered the Confederation, and coined and issued by the Royal Mint, Ottawa, January 1, 1908, to December 31, 1927.

Year	Silver						Nickel	Bronze
	50 cents	25 cents	20 cents	10 cents	5 cents	Total		
	$	$ cts.	$	$	$	$ cts.	$	$
1858	.....	.....	150,000	125,000	75,000	350,000 00	.....	100,000
1859	.....	.....	.....	.....	.....	.....	.....	95,790
1860	.....	.....	.....	.....	.....	.....	.....	1,114
1861	.....	.....	.....	.....	.....	.....	.....	(a)10,000
1861	.....	.....	.....	.....	.....	.....	.....	(b)10,000
1862	.....	.....	30,000	15,000	5,000	50,000 00	.....	(a).....
1862	.....	.....	.....	.....	.....	.....	.....	(b)10,000
1864	.....	.....	30,000	10,000	5,000	45,000 00	.....	(a)10,000
1864	.....	.....	.....	.....	.....	.....	.....	(b)10,000
1870	225,000	225,000 00	.....	160,000	140,000	750,000 00	.....	.....
(j) 1871	.....	.....	.....	.....	.....	.....	.....	(c)10,000
1871	100,000	100,000 00	.....	80,000	70,000	350,000 00	.....	.....
(j) 1872	40,000	560,000 00	.....	100,000	100,000	800,000 00	.....	.....
(j) 1874	.....	400,000 00	.....	60,000	40,000	500,000 00	.....	.....
(j) 1875	.....	250,000 00	.....	100,000	50,000	400,000 00	.....	.....
(j) 1876	.....	.....	.....	.....	.....	.....	.....	40,000
(j) 1880	.....	100,000 00	.....	150,000	150,000	400,000 00	.....	.....
(j) 1881	75,000	205,000 00	.....	95,000	75,000	450,000 00	.....	20,000
(j) 1882	.....	150,000 00	.....	100,000	50,000	300,000 00	.....	40,000
(j) 1883	.....	240,000 00	.....	30,000	30,000	300,000 00	.....	.....
1884	.....	.....	.....	15,000	10,000	25,000 00	.....	25,000
1885	.....	48,000 00	.....	40,000	50,000	138,000 00	.....	.....
1886	.....	135,000 00	.....	80,000	85,000	300,000 00	.....	15,000
1887	.....	25,000 00	.....	35,000	25,000	85,000 00	.....	15,000
1888	30,000	100,000 00	.....	50,000	50,000	230,000 00	.....	40,000
1889	.....	(d)16,585 00	.....	60,000	60,000	136,585 00	.....	.....
(j) 1890	10,000	50,000 00	.....	45,000	50,000	155,000 00	.....	10,000
1891	.....	30,000 00	.....	80,000	90,000	200,000 00	.....	(i)14,525
1892	75,500	127,500 00	.....	52,000	43,000	298,000 00	.....	12,000
1893	.....	25,000 00	.....	50,000	85,000	160,000 00	.....	20,000
1894	(e) 14,518	55,000 00	.....	50,000	25,000	144,518 00	.....	10,000
1895	.....	.....	.....	.....	.....	.....	.....	12,000
1896	.....	.....	.....	65,000	75,000	140,000 00	.....	20,000
1897	.....	.....	.....	.....	.....	.....	.....	15,000
1898	50,000	.....	.....	72,000	95,000	217,000 00	.....	.....
(j) 1898	.....	.....	.....	.....	.....	.....	.....	10,000
1899	25,000	(f)103,895 00	.....	120,000	150,000	398,895 00	.....	24,000
1900	59,000	330,000 00	.....	110,000	90,000	589,000 00	.....	10,000
(j) 1900	.....	.....	.....	.....	.....	.....	.....	26,000
1901	40,000	160,000 00	.....	120,000	100,000	420,000 00	.....	41,000
1902	60,000	116,000 00	.....	72,000	106,000	354,000 00	.....	30,000
(j) 1902	.....	200,000 00	.....	110,000	110,000	420,000 00	.....	.....
1903	.....	(g)211,537 50	.....	50,000	50,000	311,537 50	.....	40,000
(j) 1903	70,000	.....	.....	132,000	132,000	334,000 00	.....	.....
1904	30,000	100,000 00	.....	100,000	120,000	350,000 00	.....	25,000
1905	20,000	200,000 00	.....	100,000	130,000	450,000 00	.....	20,000
1906	175,000	(h)309,460 75	.....	170,000	155,000	809,460 75	.....	41,000
1907	150,000	522,000 00	.....	262,000	260,000	1,194,000 00	.....	24,000
(j) 1907	.....	.....	.....	.....	.....	.....	.....	8,000
1908	7,700	22,025 00	.....	14,900	18,400	63,025 00	.....	21,604
1909	126,600	403,900 00	.....	210,300	127,500	868,300 00	.....	39,300
1910	243,600	660,300 00	.....	337,000	223,100	1,464,000 00	.....	42,020
1911	162,000	622,000 00	.....	367,700	239,300	1,391,000 00	.....	54,480
1912	150,500	622,500 00	.....	334,500	284,500	1,392,000 00	.....	50,000
Forward	1,939,418	7,425,703 25	210,000	4,329,400	3,828,800	17,733,321 25	.....	1,071,833

Appendix No. 39—Concluded

COINAGE (in dollar and cent denomination) executed at the Royal Mint, London, and the Mint, Birmingham, for Canada, during the years, 1858 to 1907, etc.—Concluded.

Year	Silver						Nickel	Bronze
	50 cents	25 cents	20 cents	10 cents	5 cents	Total		
	$	$ cts.	$	$	$	$ cts.	$	$
Brought forward	1,939,418	7,425,703 25	210,000	4,329,400	3,828,800	17,733,321 25	.....	1,071,833
1913	138,000	447,000 00	.....	326,000	264,000	1,175,000 00	.....	55,600
1914	80,500	303,500 00	.....	194,000	156,002	734,002 00	.....	35,100
1915	6,000	92,000 00	.....	68,000	40,000	206,000 00	.....	50,400
1916	190,000	439,700 00	.....	464,300	208,000	1,302,000 00	.....	110,700
1917	334,000	786,000 00	.....	508,200	234,000	1,862,200 00	.....	116,900
1918	434,000	1,056,000 00	.....	574,000	338,000	2,402,000 00	.....	131,917
1919	538,000	1,470,000 00	.....	834,044	434,000	3,276,044 00	.....	123,800
1920	122,000	262,000 00	.....	508,000	446,000	1,338,000 00	.....	200,385
1921	4,000	14,000 00	.....	40,000	70,000	128,000 00	.....	60,700
1922	.....	6,000 00	.....	18,000	.....	24,000 00	69,000	12,400
1923	.....	2,000 00	.....	26,000	.....	28,000 00	127,000	19,300
1924	.....	.....	.....	.....	.....	.....	74,500	11,900
1925	2,000	.....	.....	12,000	.....	14,000 00	126,000	22,100
1926	.....	24,000 00	.....	26,000	.....	50,000 00	168,500	28,200
1927	.....	430,000 00	.....	144,000	.....	574,000 00	249,000	37,500
Total	3,787,918	12,757,903 25	210,000	8,071,944	6,018,802	30,846,567 25	814,000	2,088,735

NOTE.—*(a)* New Brunswick coinage. *(b)* Nova Scotia coinage. *(c)* Prince Edward Island coinage. *(d)* Recoined from withdrawn 20 cent pieces of the nominal value of $17,074. *(e)* Recoined from withdrawn 20 cent pieces of the nominal value of $15,000. *(f)* Including $18,895, recoined from withdrawn 20 cent pieces of the nominal value of $9,500 and worn silver coin of the estimated value of $10,500. *(g)* Partly produced from worn silver coin of the nominal value of $11,686.75. *(h)* Partly produced from the worn silver coin of the nominal value of $2,000. (i) Including $4,525, produced from old copper and bronze coin. *(j)* Coined at the Mint, Birmingham.

The change from large to small copper coin was made May 17, 1920.

Appendix No. 40

STATEMENT showing amount of United States silver, nickel and bronze coin and Newfoundland coin, withdrawn from circulation in Canada and exported during the period from April 1, 1910, to March 31, 1928, together with the expenditure in connection therewith.

—	Totals 1910 to 1927		Fiscal year 1927–28		Totals 1910 to 1928	
	United States	New-foundland	United States	New-foundland	United States	New-foundland
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario	5,810,418 73	4,000 00	703,250 00	7,000 00	6,513,668 73	11,000 00
Quebec	2,198,973 99	10,000 00	559,750 00	10,000 00	2,758,723 99	20,000 00
Nova Scotia	239,190 40	44,000 00	37,100 00	55,000 00	276,290 40	99,000 00
New Brunswick	339,448 71	4,000 00	27,100 00	3,000 00	366,548 71	7,000 00
Manitoba	1,956,589 07	259 00	168,945 00	700 00	2,125,534 07	959 00
British Columbia	4,069,417 26	.....	601,800 00	2,000 00	4,671,217 26	2,000 00
Alberta	715,152 17	.....	70,650 00	.....	785,802 17	.....
Saskatchewan	541,308 38	.....	27,900 00	.....	569,208 38	.....
Prince Edward Island	4,985 00	3,000 00	3,450 00	2,000 00	8,435 00	5,000 00
Yukon	11,901 00	.....	.....	.....	11,901 00	.....
Total	15,887,384 71	65,259 00	2,199,945 00	79,700 00	18,087,329 71	144,959 00
Commission paid	53,443 64	.....	.....	.....	53,443 64	.....
Express charges	63,566 20	411 73	12,257 32	528 18	75,823 52	939 91
Total	117,009 84	411 73	12,257 32	528 18	129,267 16	939 91

Appendix No. 41

No. 1.—Province of Alberta—Subsidy Account

Date	—	Dr.	Cr.
1927		$ cts.	$ cts.
July 1.....	By ½ year's subsidy for its local purposes and the support of its Government and Legislature at the rate of 80 cents per head per annum on a population of 607,584 as authorized by Sec. 1, S.S. (1-b) B.N.A. Act, 1907. (Quinquennial Census July 1, 1926).....	.....	243,033 60
	By ½ year's allowance for Government and Legislature as authorized by Sec. 1 S.S. (1-a) B.N.A. Act, 1907.....	.....	95,000 00
July 2.....	To cash.....	338,033 60	
Sept. 1.....	By ½ year's interest at 5% per annum on debt allowance of $8,107,500.....	.....	202,687 50
	By ½ year's allowance in lieu of public lands (census 1921), population over 400,000.....	.....	281,250 00
	To cash.....	483,937 50	
1928			
Jan. 1.....	By ½ year's subsidy and allowance as above.....	.....	338,033 60
Jan. 2.....	To cash.....	338,033 60	
March 1....	By ½ year's allowances as above.....	.....	483,937 50
	To cash.....	483,937 50	
		1,643,942 20	1,643,942 20

No. 2.—Province of British Columbia—Subsidy Account

Date	—	Dr.	Cr.
1927		$ cts.	$ cts.
July 1.....	By ½ year's subsidy on population of 524,582 at 80 cents per head per annum (Census of 1921).....	.....	209,832 80
	By ½ year's allowance under B.N.A. Act, 1907.....	.....	95,000 00
	By ½ year's allowance in lieu of lands as authorized by O.C., Windsor, 16th May, 1871.....	.....	50,000 00
	By ½ year's interest at 5 per cent per annum on debt allowance of $583,021.40.....	.....	14,575 53
July 2.....	To Cash.....	369,408 33	
1928			
Jan. 1.....	By ½ year's subsidy and allowances as above.....	.....	369,408 33
Jan. 2.....	To Cash.....	369,408 33	
		738,816 66	738,816 66

Appendix No. 41—Continued

No. 3.—Province of Manitoba—Subsidy Account

Date	—		Dr.	Cr.
1927			$ cts.	$ cts.
July 1.....	By ½ year's subsidy for its local purposes and the support of its Government and Legislature, at the rate of 80 cents per head per annum on a population of 639,056 as authorized by Sec. 1, S.S. (1-b) B.N.A. Act 1907. (Quinquennial Census July 1, 1926).....		.....	255,622 40
	½ year's allowance for Government and Legislature as authorized by Sec. 1, S.S. (1) B.N.A. Act 1907.....		.....	95,000 00
	½ year's allowance as authorized by 2 Geo. V, Cap. 32, Sec. 5, S.S. 1, in lieu of Public Lands on population between 400,000 and 800,000.			
	(½ of $562,500).....	$ 281,250 00		
	Less ½ year's Swamp Lands deduction of 5% on $2,760,856.66.....	$69,246 41		
	Less ½ year's University Lands deduction of 5% on $300,000.00.....	7,500 00		
		76,746 41	.....	204,503 59
	By ½ year's grant of interest at 5% per annum on $7,631,683.85 in lieu of debt as authorized by 2 Geo. V, Cap. 32, Sec. 4.....		.....	190,792 09
July 2.....	To Cash.....		745,918 08	
1928				
Jan. 1.....	By ½ year's subsidy and allowances as above.....		.....	745,918 08
Jan. 2.....	To Cash.....		745,918 08	
			1,491,836 16	1,491,836 16

No. 4.—Province of New Brunswick—Subsidy Account

Date	—	Dr.	Cr.
1927		$ cts.	$ cts.
July 1.....	By ½ year's subsidy on population of 387,876 at 80 cents per head per annum (Census of 1921).....	.....	155,150 40
	½ year's allowance under B.N.A. Act, 1907.....	.....	90,000 00
	½ year's allowance in lieu of export duty on lumber.....	.....	75,000 00
	½ year's interest at 5% per annum on $529,299.39 debt allowance.....	.....	13,232 48
July 2.....	To Cash.....	333,382 88	
1928			
Jan. 1.....	By ½ year's subsidy and allowances as above.....	.....	333,382 88
Jan. 2.....	To Cash.....	333,382 88	
		666,765 76	666,765 76

Appendix No. 41—Continued

No. 5.—Province of Nova Scotia—Subsidy Account

Date	—	Dr.	Cr.
		$ cts.	$ cts.
1927			
July 1.....	By ½ year's subsidy on population of 523,837 at 80 cents per head per annum (Census of 1921).....	.....	209,534 80
	½ year's allowance under B.N.A. Act, 1907.....	.....	95,000 00
	½ year's interest at 5% per annum on debt allowance of $1,055,433.64.....	.....	26,385 84
July 2.....	To Cash.....	330,920 64	
1928			
Jan. 1.....	By ½ year's subsidy and allowances as above.....	.....	330,920 64
Jan. 2.....	To Cash.....	330,920 64	
		661,841 28	661,841 28

No. 6.—Province of Ontario—Subsidy Account

Date	—	Dr.	Cr.
		$ cts.	$ cts
1927			
July 1.....	By ½ year's subsidy on population of 2,933,662 (Census of 1921)— 2,500,000 at 80 cents per head per annum.....$ 1,000,000 00 433,662 at 60 cents per head per annum..... 130,098 60	.....	1,130,098 60
	By ½ year's allowance under 47 Vic., cap. 4.....	.....	71,207 24
	½ year's allowance under B.N.A. Act, 1907.....	.....	120,000 00
July 2.....	To Cash.....	1,321,305 84	
1928			
Jan. 1.....	By ½ year's subsidy and allowances as above.....	.....	1,321,305 84
Jan. 2.....	To Cash.....	1,321,305 84	
		2,642,611 68	2,642,611 68

No. 7.—Province of Prince Edward Island—Subsidy Account

Date	—	Dr.	Cr.
		$ cts.	$ cts.
1927			
July 1.....	By ½ year's subsidy on population of 109,078 at 80 cents per head per annum (Census of 1891).....	.....	43,631 20
	By ½ year's allowance under B.N.A. Act, 1907.....	.....	50,000 00
	By ½ year's allowance in lieu of lands.....	.....	22,500 00
	By ½ year's additional subsidy allowance under 50-51 Vic., c. 8..	.....	10,000 00
	By ½ year's further allowance in settlement of steamship service claim under 1 Edward 7, cap. 3, section 1.....	.....	15,000 00
	By ½ year's interest at 5% per annum on debt of $775,791.83.....	.....	19,394 79
	To ½ year's deduction on Land Account balance being 5% per annum on $782,402.33 as authorized by O.C. Windsor, 26th June, 1873.....	19,560 05	
	To Prince Edward Island Railway for interest on the cost and maintenance of the Hillsboro River bridge as authorized by 63-64 Vic., cap. 7.....	4,875 00	
	By ½ year's grant as authorized by 2 Geo. 5, cap. 42, sec. 2.....	.....	50,000 00
July 2.....	To Cash.....	186,090 94	
1928			
Jan. 1.....	By ½ year's subsidies and allowances as above.....	.....	210,525 99
	To deductions as above.....	24,435 05	
Jan. 2.....	To Cash.....	186,090 94	
		421,051 98	421,051 98

Appendix No. 41—Concluded

No. 8.—Province of Quebec—Subsidy Account

Date	—	Dr.	Cr.
		$ cts.	$ cts.
1927			
July 1.....	By ½ year's subsidy on population of 2,361,199 at 80 cents per head per annum (Census of 1921).....	.....	944,479 60
	½ year's allowance under 47 Vic., cap. 4.....	.....	63,730 34
	½ year's allowance under B.N.A. Act, 1907.....	.....	120,000 00
July 2.....	To cash.....	1,128,209 94	
1928			
Jan. 1.....	By ½ year's subsidy and allowances as above.....	.....	1,128,209 94
Jan. 2.....	To Cash.....	1,128,209 94	
		2,256,419 88	2,256,419 88

No. 9.—Province of Saskatchewan—Subsidy Account

Date	—	Dr.	Cr.
		$ cts.	$ cts.
1927			
July 1.....	By ½ year's subsidy for its local purposes and the support of its Government and Legislature at the rate of 80 cents per head per annum on a population of 821,500 as authorized by Section 1 (b) of the B.N.A. Act, 1907. (Quinquennial Census July 1, 1926).....	.....	328,600 00
	By ½ year's allowance for Government and Legislature as authorized by Section 1 S.S. (1-a) B.N.A. Act, 1907.....	.....	110,000 00
July 2.....	To cash.....	438,600 00	
Sept. 1.....	By ½ year's interest at 5% per annum on debt allowance of $8,107,500.....	.....	202,687 50
	By ½ year's allowance in lieu of Public Lands, population between 800,000 and 1,200,000, as authorized by 4-5 Edward 7, cap. 42 (1905), sec. 20.....	.....	375,000 00
	To cash.....	577,687 50	
1928			
Jan. 1.....	By ½ year's subsidy and allowance as above.....	.....	438,600 00
Jan. 2.....	To cash.....	438,600 00	
March 1....	By ½ year's allowances as above.....	.....	577,687 50
	To cash.....	577,687 50	
		2,032,575 00	2,032,575 00

Subsidy allowances from July 1867 to close of fiscal year ended March 31, 1928

Province	Allowances for Government	Allowances per head of population	Special Grants	Interest on Debt Allowances	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Alberta.....	4,016,666 67	8,651,199 07	11,812,500 00	9,323,625 00	33,803,990 74
British Columbia.....	4,990,000 00	9,252,139 20	6,700,000 00	1,671,394 26	22,613,533 46
Manitoba.....	5,595,000 00	13,481.484 80	12,009,683 60	11,061,114 57	42,147,282 97
New Brunswick.....	5,780,000 00	15,867,448 00	8,880,000 00	1,238,845 24	31,766,293 24
Nova Scotia.....	6,390,000 00	20,823,970 40	826,980 00	2,866,081 59	30,907,031 99
Ontario.....	8,240,000 00	87,621,366 79	.....	4,031,617 26	99,892,984 05
Prince Edward Island.....	3,120,000 00	4,701,867 20	3,729,025 04	2,331,318 33	13,882,210 57
Quebec.....	7,840,000 00	70,090,996 00	.....	4,432,028 13	82,363,024 13
Saskatchewan.....	4,176,666 67	11,026,843 60	12,656,250 00	9,323,625 00	37,183,385 27
	50,148,333 34	241,517,315 06	56,614,438 64	46,279,649 38	394,559,736 42

REPORT

OF THE

DEPARTMENT OF NATIONAL REVENUE

CONTAINING

ACCOUNTS OF REVENUE

With Statements relative to the Imports, Exports, Excise and Income

OF THE

DOMINION OF CANADA

FOR THE FISCAL YEAR ENDED MARCH 31

1928

COMPILED FROM OFFICIAL RETURNS

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., etc., etc., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of National Revenue containing Tables and Statements relative to the Imports, Exports, Excise and Income of the Dominion of Canada, for the fiscal year ended 31st March, 1928, as compiled from official returns.

All of which is respectfully submitted.

W. D. EULER,
Minister of National Revenue.

OTTAWA, 29th October, 1928.

W. D. EULER, Esq.,
Minister of National Revenue.

SIR,—I have the honour to hand you the Annual Report of the Department of National Revenue (Customs Division), containing Accounts of Revenue with statements of Imports and Exports of the Dominion of Canada for the fiscal year ended 31st March, 1928.

I have the honour to be, sir,

Your obedient servant,

(Sgd.) R. W. BREADNER,
Commissioner of Customs.

OTTAWA, 25th October, 1928.

PREFACE

The Customs Act contains the following provisions respecting the Annual Report of the Department of Customs:—

"305. The Minister shall annually make to the Governor General, to be laid before Parliament within fifteen days after the meeting thereof, a report and statement of the transactions and affairs of the department during the year then next preceding."

The Inland Revenue Act also contains provisions respecting the Annual Report of the Inland Revenue Service as follows:—

"14. The Minister shall annually make to the Governor General a report and statement of the transactions and affairs of the Department during the year then next preceding, which shall be laid before Parliament within fifteen days after the next meeting thereof."

The unrevised monthly statements of imports and exports, prepared and published under the direction of the Department of Customs from July 1, 1900, ceased to be published by this Department since March, 1918.

Detailed statements, however, showing the quantity, value, and origin of imports and the quantity, value, and destination of exports, continue to be prepared and furnished monthly by the Department of Customs from April 1, 1918, for publication by the Dominion Bureau of Statistics.

Trade statistics classified by countries, with other details, compiled from Customs returns, are now published by the Dominion Bureau of Statistics.

Part I of this report contains tables and statements relative to the Customs.

Part II of this report contains tables and statements relative to Excise.

Part III of this report contains tables relative to Income Taxes.

The differences between revenue totals in Statement Number 9, Part I and totals shown in other statements of revenue, represent the differences between actual cash received in the Department and remitted to the Receiver General, and totals shown on entries passed, and are adjusted in the next fiscal year.

PART I

CUSTOMS

TABLES AND STATEMENTS OF IMPORTS AND EXPORTS

INDEX TO CUSTOMS TABLES AND STATEMENTS

No. of Statement	Subject	Description	Page
		COMPARATIVE TABLES	
1	Imports and Exports	Total Exports and Imports entered for Home Consumption and duty collected from 1868 to 1928	7
2	Aggregate Trade	Total Trade entered for Home Consumption and Exported by Countries, 1873 to 1928	8
3	Exports	Total Exports by Countries, 1873 to 1928	10
4	Imports	Total Value of Goods entered for Home Consumption by Countries, 1873 to 1928	12
5	Revenue	Total Duty Collected by Countries, 1873 to 1928	14
6	" percentage	Percentage of Duty on Imports entered for Home Consumption, percentage expense of collection, 1868 to 1928	17
7	Imports and Exports	Comparative Statement of Imports entered for Home Consumption and Exports, showing percentage excess of Imports entered for Home Consumption over Exports, etc., 1868 to 1928	18
8	Imports and Exports	Comparative Statement by Ports: Exports and Imports entered for Home Consumption, 8 years	20
		TABLES AND STATEMENTS FOR FISCAL YEAR, 1928	
9	Revenue and other services	Statement of Customs revenue and other services by Ports, Outports and Stations	26
10	Imports and Exports	Dominion Abstract, value of Imports entered for Home Consumption by Countries, 1928 (Dutiable and Free) and Exports. (Goods the Produce of Canada, and Goods not the Produce of Canada)	52
11	Warehousing	Statement of the Value of Goods remaining in Warehouse 1926, 1927 and 1928	54
12	Imports	Abstract by Countries, value of goods entered for Home Consumption	55
13	Exports	Abstract by Countries of Total Exports	58

No. 1—STATEMENT showing the Value of Total Exports and Imports entered for Home Consumption in the Dominion, with the duty collected thereon, for the undermentioned years.

—	Total Exports	Total Imports entered for Home Consumption	Grand Total Imports entered for Home Consumption and Exports	Total Duty Collected
	$	$	$	$
Fiscal year ended June 30, 1868.....	57,567,888	71,985,306	129,553,194	8,819,431 63
" " 1869.....	60,474,781	67,402,170	127,876,951	8,298,909 71
" " 1870.....	73,573,490	71,237,603	144,811,093	9,462,940 44
" " 1871.....	74,173,618	86,847,482	161,121,100	11,843,655 75
" " 1872.....	82,639,663	107,709,116	190,348,779	13,045,493 50
" " 1873.....	89,789,922	127,514,594	217,304,516	13,017,730 17
" " 1874.....	89,351,928	127,404,169	216,756,097	14,421,882 67
" " 1875.....	77,886,979	119,618,657	197,505,636	15,361,382 12
" " 1876.....	80,966,435	94,733,218	175,699,653	12,833,114 48
" " 1877.....	75,875,393	96,300,483	172,175,876	12,548,451 09
" " 1878.....	79,323,667	91,199,577	170,523,244	12,795,693 17
" " 1879.....	71,491,255	80,341,608	151,832,863	12,939,540 66
" " 1880.....	87,911,458	71,782,349	159,693,897	14,138,849 22
" " 1881.....	98,290,823	91,611,604	189,902,427	18,500,785 97
" " 1882.....	102,137,203	112,648,927	214,786,130	21,708,837 43
" " 1883.....	98,085,804	123,137,019	221,222,823	23,172,308 97
" " 1884.....	91,406,496	108,180,644	199,587,140	20,164,963 37
" " 1885.....	89,238,361	102,710,019	191,948,380	19,133,558 99
" " 1886.....	85,251,314	99,602,694	184,854,008	19,448,123 70
" " 1887.....	89,515,811	105,639,428	195,155,239	22,469,705 83
" " 1888.....	90,203,000	102,847,100	193,050,100	22,209,641 53
" " 1889.....	89,189,167	109,673,447	198,862,614	23,784,523 23
" " 1890.....	96,749,149	112,765,584	209,514,733	24,014,908 07
" " 1891.....	98,417,296	113,345,124	211,762,420	23,481,069 13
" " 1892.....	113,963,372	116,978,943	230,942,318	20,550,581 53
" " 1893.....	118,564,352	121,705,030	240,269,382	21,161,710 93
" " 1894.....	117,524,949	113,093,983	230,618,932	19,379,822 32
" " 1895.....	113,638,803	105,252,511	218,891,314	17,887,269 47
" " 1896.....	121,013,852	110,587,480	231,601,332	20,219,037 32
" " 1897.....	137,950,253	111,294,021	249,244,274	19,861,996 77
" " 1898.....	164,152,683	130,698,006	294,850,689	22.157,788 49
" " 1899.....	158,896,905	154,051,593	312,948,498	25,764,228 75
" " 1900.....	191,894,723	180,804,316	372,699,039	28,889,110 13
" " 1901.....	196,487,632	181,237,988	377,725,620	29,106,979 89
" " 1902.....	211,640,286	202,791,595	414,431,881	32,425,532 31
" " 1903.....	225,849,724	233,790,516	459,640,240	37,110,354 59
" " 1904.....	213,521,235	251,464,332	464,985,567	40,954,349 14
" " 1905.....	203,316,872	261,925,554	465,242,426	42,024,339 92
" " 1906.....	256,586,630	290,360,807	546,947,437	46,671,101 18
" Mar. 31, *1907.....	205,277,197	257,254,882	462,532,079	40,290,171 70
" " 1908.....	280,006,606	358,428,616	638,435,222	58,331,074 04
" " 1909.....	261,512,159	298,205,957	559,718,116	48,056,791 93
" " 1910.....	301,358,529	375,833,016	677,191,545	61,024,239 21
" " 1911.....	297,196,365	461,951,318	759,147,688	73,312,367 59
" " 1912.....	315,317,250	547,482,190	862,799,440	87,576,036 52
" " 1913.....	393,232,057	675,517,045	1,068,749,102	115,063,687 39
" " 1914.....	478,997,928	633,692,449	1,112,690,377	107,180,578 33
" " 1915.....	490,808,877	587,439,304	1,078,248,181	79,205,910 27
" " 1916.....	882,872,502	542,077,361	1,424,949,863	103,940,100 86
" " 1917.....	1,375,758,148	873,437,426	2,249,195,574	147,631,454 93
" " 1918.....	1,586,169,792	962,543,746	2,548,713,538	161,595,628 51
" " 1919.....	1,268,765,285	916.429,335	2,185,194,620	158,046,333 87
" " 1920.....	1,286.658,709	1,064,528,123	2,351,186,832	187,524,181 77
" " 1921.....	1,210,428,119	1,240,158,882	2,450,587,001	179,667,683 12
" " 1922.....	753,927,009	747,804,332	1,501,731,341	121,487,393 90
" " 1923.....	945,295,837	802,579,244	1,747,875,081	133,803,370 12
" " 1924.....	1,058,763,297	893,366,867	1,952,130,164	135,122,344 76
" " 1925.....	1,081,361,643	796,932,537	1,878,294,180	120,122,453 70
" " 1926.....	1,328,700,137	927,328,732	2,256,028,869	143,933,110 07
" " 1927.....	1,267,573,142	1,030,892,505	2,298,465,647	158,966,367 03
" " 1928.....	1,250,456,297	1,108,956,466	2,359,412,763	171,872,768 00

* 9 months, change of fiscal year.

No. 2—STATEMENT showing Aggregate Trade of the Dominion by Countries on the basis of Goods entered for Home Consumption and Exported

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Nether-lands
	$	$	$	$	$	$	$	$
1873.....	107,266,624	89,808,204	2,055,195	1,176,478	502,966	266,188	229,657	229,770
1874.....	108,083,642	90,524,060	2,569,712	1,022,428	459,027	294,007	236,296	271,043
1875.....	100,379,969	80,717,803	2,154,065	839,442	390,784	236,790	214,366	260,503
1876.....	81,457,737	78,003,492	2,394,812	608.355	445,151	199,195	183,199	297,895
1877.....	81,139,708	77,087,914	1,730.062	404,918	340,757	175,425	242,942	296,860
1878.....	83,372,719	73,876.437	1,754,394	521,580	325,245	145,941	205,171	266,764
1879.....	67,288,848	70,964,720	2,247,066	552,999	394,445	161,258	181,933	210,288
1880.....	80,307,286	62,696,857	1,928,670	532,028	297,245	201,652	623,295	273,837
1881.....	97,335,378	73,570,337	2,294,043	1,019,198	446,337	165,487	234,723	440,944
1882.....	95,871,802	96,229,763	2,922,931	1,633,118	570,301	201,656	256,841	613,241
1883.....	99,197,682	97,701,056	2.934,210	1.942,851	749,897	243,192	322,554	324,800
1884.....	87,154,242	89,333,366	2,160,804	2,171,346	648,569	240.235	322,499	333,977
1885.....	83,284,482	86,903,935	2,239,890	2,385,344	481,910	227,096	255,712	361,879
1886.....	82,143,828	81,436,808	2,509,581	2,408,821	432,540	301,927	215,298	309,559
1887.....	89,534,079	82,767,265	2,415,001	3,672,985	481,289	204,671	245,560	309,920
1888.....	79,383,705	91,053,913	2,642.557	3,563,106	427,249	230,397	235,816	332,169
1889.....	80,422,515	94,059,844	2,562,893	3,836,173	420,794	238,106	186,186	414,302
1890.....	91,743,935	92,814,783	2,894,154	4.286.136	392,294	291,811	244,545	423,309
1891.....	91,328,384	94,824,352	2,565,877	4,336,232	555,917	191,148	322,808	404,532
1892.....	106,254,984	92,125.599	2,770,173	6,526,228	489,652	155,479	490,839	846,167
1893.....	107,228,906	102,144,986	3,096,164	4,567,224	387,861	135,482	661,403	656,427
1894.....	107,256,123	88,844,040	3,081,950	7,887,594	445,567	126,469	511,631	625,764
1895.....	92,988,727	95,932,197	2,920,456	5,421,135	436,580	115,921	415,919	348,164
1896.....	99,670,030	103,022,434	3,392,482	6,688,990	445,592	88,262	287,676	439,680
1897.....	106,639,690	111,022,513	3.292,047	7,538,800	436,984	88,337	333,512	480,531
1898.....	137,499,735	124,410,926	5,000,613	7,421,462	578,462	135,154	495,023	750,486
1899.....	136,151,978	138,140,687	5,447,017	9,613,025	593,660	92,937	520,684	872,941
1900.....	152,526,098	178,463,401	5,743,272	10,699,401	647,157	187,801	405,029	767,781
1901.....	148,347,120	182,867,238	6,979,352	9,162,957	897,893	181,707	642,424	984,840
1902.....	166,533,983	192,004,734	8,061,042	13,515,747	856,793	234,874	963,641	1,195,856
1903.....	190,099,222	209,389,119	7,921,647	14,380,336	962,497	293,376	837,555	1,889,869
1904.....	179,368,950	223,599,447	7,804,453	9,994,827	963,674	210,053	642,891	1,951,398
1905.....	162,301,480	240.142,642	8,570,437	7,842,068	779,482	227,281	819,610	1,505,474
1906.....	202,289,527	273,668,593	9,788,078	8,859,871	984,477	218,202	769,610	2,004,640
*1907.....	169,717,174	234,964,509	8,108,984	6,541.513	934,469	282,622	807,347	1,816,967
1908.....	229,443,627	324,173,325	11,708,641	10,537,654	1,233,571	194,121	1,131,336	2,281.420
1909.....	204,428,319	272,631,127	11,373,531	7,536,917	979,536	171,116	2,382,112	2.515,851
1910.....	244,984,407	336,652,587	12,750,192	10,436,421	1,071,719	200,253	1,722,906	3,947,842
1911.....	246,901,572	404,331,540	14,345,865	12,710,357	1,182,690	274,468	1,341,418	3,217,597
1912.....	268,760,435	476,889,112	13,868,369	14,904,919	1,387,775	329,932	1,431,913	4,206,628
1913.....	316,732,000	608,251,944	17,944,367	17,616,941	1,307,598	392,391	2,319,304	5,851,267
1914.....	354,393,642	611,245,464	18,087,097	19,019,959	1,416,132	332,862	2,745,643	8,524,262
1915.....	301,919,644	644,026,253	23,044,891	7,248,996	1,467,128	1,004,093	3,313,709	7,024,085
1916.....	543,190,036	718,918,685	42,035,283	86,304	1,252,023	264,360	11,653,559	3,621,359
1917.....	877,834,291	1,164,502,306	73,134,008	14,132	1,240,725	469,783	12,695,606	2,804,307
1918.....	942,397,682	1,233,297,045	211,859,127	27,181	907,063	253,298	4,109,492	3,517,575
1919.....	633,874,234	1,224,666,313	105,993,753	75	928,738	479,135	14,585,836	694,394
1920.....	622,319,367	1,302,230,817	72,458,218	700,081	2,649,452	510,409	17,966,261	8,048,082
1921.....	528,202,233	1,416,878,756	46,660,391	9,764,721	7,427,904	1,994,116	59,516,787	24,529,612
1922.....	417,498,536	820,062,373	21,730.443	6,633,097	2,627.903	310,170	16,727,800	13,594,985
1923.....	521,248,669	921,337,459	26,440,012	12,631,288	2,674,986	508,906	13,791,054	15,698,356
1924.....	514,747,492	1,042,899,356	34,701,358	21,677,344	2,461,361	1,275,897	20,352,765	14,885,187
1925.....	548,251,994	936,964,652	28,865,521	31,170,271	1,946,318	337,201	16,075,345	17,877,961
1926.....	672,997,353	1,095,671,872	33.202,810	40,749,955	2,918,397	470,612	15,399,591	30,628,787
1927.....	611,961,390	1,167,002,022	39,295,797	49,638,214	2,763.845	1,744,483	26,267,670	34,139,725
1928.....	598,659,210	1,216,080.756	36,511,564	59.381,143	3,188,118	1,664,489	22,987,220	44,475,273

*9 months.

No. 2—STATEMENT showing Aggregate Trade of the Dominion by Countries on the basis of Goods entered for Home Consumption and Exported—*Concluded*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Total
	$	$	$	$	$	$	$	$
1873	364,456	4,609,552	1,163,425	1,701,633	1,709,856	120,514	1,099,998	217,304,516
1874	534,153	2,657,547	6,086,529	1,686,508	1,263,728	139,674	927,743	216,756,097
1875	337,674	2,806,055	6,139,910	1,064,593	694,472	116,128	1,153,082	197,505,636
1876	374,880	2,675,477	5,291,433	975,762	971,314	56,168	1,764,483	175,699,653
1877	318,724	2,753,748	5,031,667	656,591	455,755	69,066	1,471,734	172,175,876
1878	805,692	2,767,347	4,397,996	669,804	486,244	61,178	1,366,532	170,523,244
1879	219,461	2,280,823	4,753,099	745,830	505,513	94,781	1,291,709	151,832,863
1880	837,897	2,002,261	6,489,257	1,073,421	931,457	94,225	1,314,429	159,693,807
1881	671,267	2,175,773	6,962,516	1,369,731	1,430,734	141,789	1,644,170	189,902,420
1882	645,568	2,468,432	7,018,956	2,314,779	1,635,717	268,093	2,134,932	214,786,133
1883	611,112	2,953,273	7,494,291	2,954,628	1,750,642	336,040	1,706,595	221,222,820
1884	746,528	2,701,120	6,726,486	2,756,371	1,970,541	242,380	2,078,676	199,587,140
1885	551,645	2,022,073	5,698,057	2,802,042	2,528,369	217,666	1,989,280	191,948,388
1886	517,472	2,139,30	5,266,042	2,111,029	2,495,703	203,085	2,363,014	184,854,009
1887	927,580	2,072,946	4,017,593	2,625,066	2,819,584	219,777	2,841,913	195,155,200
1888	505,800	1,945,426	5,870,149	2,487,240	2,261,155	194,938	2,016,480	193,050,143
1889	595,496	1,791,496	6,138,109	2,813,587	2,048,712	166,905	3,167,496	198,862,817
1890	763,146	1,655,400	5,868,189	2,555,849	2,161,816	316,923	3,162,393	209,514,733
1891	728,120	2,218,911	6,360,926	1,782,950	2,202,102	244,319	3,685,842	211,762,420
1892	573,244	2,503,963	7,638,846	1,905,346	3,300,108	193,033	5,168,657	230,942,318
1893	1,268,551	3,247,903	7,390,377	2,099,356	2,766,712	258,464	4,465,666	240,269,382
1894	1,258,692	3,633,154	7,121,172	2,264,677	3,065,768	276,065	4,220,266	230,618,932
1895	693,019	3,065,046	8,681,622	1,610,470	2,906,574	260,040	3,059,444	218,891,312
1896	1,018,789	2,333,721	4,707,243	2,063,145	3,339,429	332,405	3,771,454	231,601,334
1897	1,518,218	2,144,874	4,332,230	2,026,085	3,300,331	223,192	5,882,830	249,244,274
1898	2,204,054	2,632,184	3,829,346	2,505,195	2,829,890	357,003	4,201,156	294,850,689
1899	3,168,136	2,335,323	4,398,902	2,631,635	3,194,829	571,526	5,215,018	312,948,498
1900	4,421,716	2,804,748	4,202,119	2,423,994	2,749,759	529,976	6,726,187	372,699,039
1901	6,634,592	2,886,067	4,707,677	2,567,278	3,149,591	603,397	7,113,487	377,725,620
1902	4,156,049	3,498,482	5,472,747	3,440,987	2,555,466	780,183	11,161,301	414,431,881
1903	4,950,732	3,714,157	6,021,294	4,532,008	2,440,999	952,326	11,255,103	459,640,240
1904	4,255,930	3,975,418	8,397,290	5,613,612	3,134,959	1,392,895	13,679,770	464,985,567
1905	3,514,994	4,528,326	10,039,302	6,816,171	3,900,776	1,776,405	12,288,038	465,242,426
1906	4,175,238	4,972,281	9,944,179	9,425,735	3,684,769	2,042,635	14,119,602	546,947,437
*1907	3,553,137	3,708,200	6,935,876	8,814,147	3,001,144	1,669,063	11,736,927	462,532,079
1908	5,758,128	5,185,987	12,844,390	7,555,644	4,611,199	2,752,443	19,023,736	638,435,222
1909	5,829,033	5,190,721	12,626,749	8,262,369	4,405,402	2,195,342	19,189,991	559 718,116
1910	6,139,980	5,438,571	13,284,809	0,961,629	4,892,218	2,614,038	22,093,973	677,191,545
1911	6,387,798	5,693,035	15,603,170	12,482,760	4,255,948	3,125,583	27,293,881	759,147,683
1912	7,418,641	6,126,200	15,391,818	15,363,540	4,015,357	3,477,524	29,227,277	862,799,440
1913	8,829,175	6,785,116	16,814,434	4,881,135	6,137,859	4,312,074	40,573,517	1,068,749,102
1914	9,310,319	6,611,551	18,501,695	13,046,555	5,579,724	4,361,520	39,513,952	1,112,690,377
1915	5,135,322	5,726,336	17,507,373	11,708,498	5,159,252	3,995,701	39,966,900	1,078,248,181
1916	394,077	6,648,822	18,281,199	17,855,782	6,468,457	4,504,220	49,775,697	1,424,949,863
1917	679,618	9,018,908	27,937,171	18,916,441	10,951,591	5,172,711	43,823,976	2,249,195,574
1918	4,922,426	13,436,848	30,173,497	17,438,096	20,925,452	3,154,564	62,294,192	2,548,713,538
1919	956,588	15,013,986	33,007,398	28,412,651	30,977,454	1,788,682	93,815,383	2,185,194,620
1920	29,510,511	19,087,010	60,814,200	33,687,146	29,444,096	9,248,533	142,512,643	2,351,186,832
1921	44,966,473	20,219,013	74,880,574	37,143,190	24,648,491	15,594,889	138,159,851	2,450,587,001
1922	16,264,969	11,018,036	40,942,973	26,608,212	26,389,501	9,039,392	72,212,951	1,501,731,341
1923	17,589,177	10,155,129	46,243,954	26,729,610	28,476,204	8,272,283	96,077,994	1,747,875,081
1924	22,817,813	12,450,910	53,059,499	32,313,659	49,118,675	9,729,609	119,639,239	1,952,130.164
1925	21,730,493	14,686,371	47,037,745	40,443,339	39,412,647	8,570,661	124,923,661	1,878,294,180
1926	29,846,437	13,270,802	53,352,616	44,164,607	71,294,341	8,694,925	143,365,764	2,256,028,869
1927	31,064,887	13,462,298	52,666,531	52,471,351	59,679,059	10,104,064	146,204,302	2,298,465,647
1928	30,804,446	14,208,880	50,205,577	58,672,057	61,499,218	9,116,576	151,958,236	2,359,412,763

*9 months.

No. 3—Statement showing Value of Exports by Countries

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Netherlands*
	$	$	$	$	$	$	$	$
1873	38,743,848	42,072,526	31,907	76,553	25,080	191,156	177,232	13,142
1874	45,003,882	36,244,311	267,212	65,511	960	193,463	190,211	14,905
1875	40,032,902	29,911,983	212,767	91,019	7,300	170,784	170,408	28,724
1876	40,723,477	31,933,459	553,935	125,768	9,417	127,540	142,787	30,816
1877	41,567,469	25,775,245	319,330	34,324	62,659	129,960	213,692	94,303
1878	45,941,539	25,244,898	369,391	122,254	47,816	104,028	151,861	53,750
1879	36,295,718	27,165,501	714,875	112,090	50,596	135,748	148,472	9,713
1880	45,846,062	33,349,909	812,829	82,237	60,727	165,885	163,787	102,592
1881	53,571,570	36,866,225	662,711	84,932	46,653	108,594	145,997	215,754
1882	45,274,461	47,910,711	825,573	153,114	108,082	149,744	163,755	365,198
1883	47,145,217	41,668,723	617,730	133,697	164,925	179,843	218,113	27,599
1884	43,736,227	38,840,540	390,955	195,575	144,092	172,252	247,151	15,500
1885	41,877,705	39,752,734	303,309	264,075	132,695	166,730	147,550	24,094
1886	41,542,629	36,578,769	534,363	253,298	53,075	245,450	108,601	7,587
1887	44,571,846	37,660,199	341,531	437,536	72,020	146,528	125,681	14,859
1888	40,084,984	42,572,065	397,773	198,543	52,317	155,821	55,090	378
1889	38,105,126	43,522,404	334,210	143,603	13,526	166,021	60,062	1,222
1890	48,353,694	40,522,810	278,552	507,143	69,788	207,777	81,059	1,042
1891	49,280,858	41,138,695	253,734	532,142	67,110	120,611	90,999	14,741
1892	64,906,549	38,988,027	367,539	942,698	93,476	102,370	149,280	567,879
1893	64,080,493	43,923,010	264,047	750,461	44,355	83,001	87,387	282,569
1894	68,538,856	35,809,940	544,986	2,046,052	56,274	79,363	109,188	281,058
1895	61,856,990	41,297,676	335,282	620,976	34,101	58,781	34,325	140,264
1896	66,690,288	44,448,410	581,540	757,531	83,814	41,666	56,759	139,828
1897	77,227,502	49,373,472	690,696	2,045,432	50,452	36,745	108,627	104,422
1898	104,998,818	45,705,336	1,025,262	2,837,448	89,675	87,835	73,765	376,439
1899	99,091,855	45,133,521	1,557,722	2,219,569	59,178	29,641	125,265	372,548
1900	107,736,368	68,619,023	1,374,770	1,715,903	86,456	115,016	260,456	188,199
1901	105,328,956	72,382,230	1,581,331	1,141,552	155,354	85,403	315,063	187,378
1902	117,320,221	71,197,684	1,388,848	1,692,578	161,823	105,495	236,899	320,241
1903	131,202,321	71,783,924	1,341,618	2,097,699	138,553	164,184	295,770	619,329
1904	117,591,376	72,772,932	1,597,928	1,819,223	98,578	109,340	240,963	1,035,327
1905	101,958,771	77,404,071	1,511,298	1,146,654	50,223	128,993	198,973	550,821
1906	133,094,937	97,806,552	2,120,091	1,872,557	55,686	89,598	215,855	824,768
*1907	105,135,801	79,021,480	1,409,572	1,006,605	48,315	154,438	352,842	814,977
1908	134,484,156	113,520,500	1,806,732	2,374,607	106,594	46,865	349,839	855,085
1909	133,745,375	92,604,357	3,176,096	1,476,552	45,682	48,833	1,620,773	1,242,730
1910	149,634,107	113,150,778	2,640,648	2,501,191	51,944	59,731	829,508	1,937,852
1911	136,965,111	119,396,801	2,782,092	2,663,017	27,943	88,088	379,270	1,397,019
1912	151,853,413	120,534,634	2,123,705	3,814,914	114,564	70,390	285,091	1,782,726
1913	177,982,002	167,110,382	2,564,603	3,402,394	48,628	49,142	605,719	2,741,713
1914	222,322,766	200,459,373	3,810,562	4,433,736	63,999	55,481	655,256	5,508,806
1915	211,758,863	215,409,326	14,595,705	2,162,010	489,680	788,485	1,840,910	5,254,829
1916	463,081,241	320,225,080	36,085,813	.....	634,998	56,726	10,733,288	2,563,626
1917	756,071,077	486,870,690	66,652,910	.....	331,179	209,689	11,468,599	1,569,314
1918	861,073,399	441,390,920	206,585,063	.....	98,256	14,878	3,338,305	2,463,309
1919	560,839,116	477,745,659	102,360,853	.....	213,095	367,446	14,030,724	198,985
1920	495,960,118	501,130,117	61,827,353	655,826	1,108,904	197,497	16,967,221	5,781,913
1921	314,228,671	560,701,936	27,522,329	8,217,036	5,110,725	1,476,894	57,771,457	20,291,821
1922	300,363,193	304,104,177	8,248,438	4,592,081	848,495	87,664	15,340,430	9,592,938
1923	379,918,526	380,347,721	14,175,091	10,062,879	978,076	384,878	12,189,829	10,727,688
1924	361,160,802	441,642,909	18,933,507	16,294,838	794,792	1,015,496	18,502,921	9,525,207
1925	397,168,048	427,184,643	10,404,896	24,382,660	178,096	9,413	14,144,853	12,795,119
1926	509,266,143	485,952,235	14,051,111	30,763,192	832,547	121,795	12,801,832	23,764,224
1927	448,022,334	479,331,980	15,303,475	34,608,076	543,022	1,273,457	22,823,608	26,446,057
1928	412,763,353	496,644,519	10,037,832	42,325,345	615,968	942,210	18,745,418	35,681,224

* 9 months.

No. 3—STATEMENT showing Value of Exports by Countries—*Concluded*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Australia	Other Countries	Total
	$	$	$	$	$	$	$	$
1873	17,754	2,800,555	3,988,493	1,285,434	46,466	41,822	277,954	89,789,922
1874	240,494	1,569,079	3,778,796	1,212,978	39,222	98,733	432,171	89,351,928
1875	59,563	1,901,831	3,945,506	785,797	37,046	181,938	349,411	77,886,979
1876	13,825	1,900,891	3,675,320	688,209	23,075	79,643	938,273	80,966,435
1877	66,912	2,112,106	3,788,858	651,625	37,149	185,610	836,151	75,875,393
1878	49,998	2,094,682	3,414,147	654,357	102,568	370,723	651,655	79,323,667
1879	40,430	1,641,417	3,500,670	741,442	56,551	290,762	587,270	71,491,255
1880	688,811	1,510,300	3,544,103	789,940	37,546	139,901	616,829	87,911,453
1881	258,433	1,523,469	3,147,369	732,111	19,761	146,363	580,881	98,290,828
1882	142,358	1,974,923	2,995,572	941,162	106,675	340,608	655,267	102,137,203
1883	195,705	2,187,338	3,125,031	1,489,957	105,388	375,065	451,473	98,085,804
1884	287,378	1,920,450	3,119,569	1,277,383	60,979	502,181	496,264	91,406,496
1885	72,385	1,670,968	2,535,283	1,461,206	29,918	415,887	383,822	89,238,361
1886	6,565	1,754,980	2,121,570	1,010,034	63,118	259,960	711,315	85,251,314
1887	223,729	1,718,604	2,075,411	1,426,660	69,196	269,471	362,540	89,515,811
1888	17,057	1,523,827	2,601,486	1,510,637	132,448	446,019	454,555	90,203,000
1889	64,756	1,303,335	2,759,455	1,488,999	84,174	661,208	481,051	89,189,167
1890	41,814	1,185,739	2,719,141	1,551,887	61,751	471,028	695,924	96,749,149
1891	72,672	1,467,908	3,122,770	1,063,172	78,791	589,100	523,993	98,417,296
1892	56,212	1,750,714	3,546,559	1,027,525	283,251	436,603	744,693	113,963,375
1893	669,040	2,594,633	3,145,708	1,326,743	341,140	288,352	683,413	118,564,352
1894	708,455	2,818,592	3,443,761	1,392,285	540,849	322,745	832,545	117,524,949
1895	251,402	2,325,196	3,725,426	1,303,474	378,160	417,124	853,626	113,638,803
1896	98,031	1,782,309	2,810,817	1,496,118	668,011	517,258	841,472	121,013,852
1897	354,584	1,692,798	2,643,360	1,405,359	903,922	1,418,289	894,593	137,950,253
1898	973,944	2,167,860	2,749,080	1,060,420	511,919	1,630,714	864,168	164,152,683
1899	849,413	1,808,317	3,043,963	1,456,051	425,350	1,506,138	1,218,374	158,896,905
1900	1,197,798	2,144,070	2,870,343	1,431,107	368,615	1,626,441	2,160,158	191,894,723
1901	2,806,142	2,260,499	2,905,937	1,519,190	699,569	2,311,405	1,807,623	196,487,632
1902	2,444,450	2,381,082	3,298,912	1,781,913	570,586	2,586,554	5,153,000	211,640,286
1903	2,150,505	2,516,576	3,642,176	2,542,056	501,057	2,929,861	3,924,050	225,849,724
1904	1,126,417	2,898,751	3,583,475	2,456,608	568,983	2,622,756	4,898,578	213,521,235
1905	1,739,807	3,473,713	4,401,115	2,880,552	1,520,053	2,194,223	4,157,605	203,316,872
1906	1,565,166	3,213,856	4,575,212	3,623,065	1,467,252	2,082,219	3,979,816	256,586,630
*1907	1,857,958	2,244,460	3,527,153	3,584,329	890,425	1,998,968	3,169,865	205,277,197
1908	3,377,479	3,408,518	4,543,889	4,467,584	1,705,901	2,873,461	6,085,396	280,006,606
1909	3,927,445	3,552,293	4,534,446	3,478,476	1,778,666	2,769,049	7,511,386	261,512,159
1910	2,900,092	3,970,952	5,948,245	4,744,524	1,910,724	3,583,447	7,494,786	301,358,529
1911	2,773,444	3,874,775	6,567,307	5,149,771	1,149,810	3,925,592	10,056,325	297,196,365
1912	3,732,222	4,284,313	6,900,940	4,825,030	902,375	3,947,015	10,145,918	315,317,250
1913	4,808,997	4,728,142	6,237,468	4,352,278	1,881,558	3,996,387	12,722,644	393,232,057
1914	4,819,843	4,770,200	6,997,711	4,026,398	2,062,246	4,705,822	14,305,729	478,997,928
1915	3,259,359	4,481,176	6,418,479	2,114,370	1,333,404	5,552,686	15,349,595	490,808,877
1916	334,762	5,071,038	6,403,078	5,125,374	1,534,722	7,773,209	23,249,547	882,872,502
1917	664,722	6,871,100	9,192,467	5,609,604	1,700,514	6,576,725	21,969,558	1,375,758,148
1918	4,909,453	10,489,321	11,921,116	5,159,709	7,333,243	8,676,257	22,716,473	1,586,169,792
1919	950,318	11,915,152	16,706,634	14,975,550	15,404,866	14,172,817	38,866,070	1,268,765,285
1920	28,599,104	16,940,596	20,274,469	14,589,853	14,601,580	11,538,966	96,485,192	1,286,658,709
1921	40,273,105	17,332,810	21,562,715	17,786,847	11,390,321	18,171,685	88,589,767	1,210,428,119
1922	12,419,251	9,626,010	15,677,062	8,884,181	16,781,293	10,687,484	36,674,312	753,927,009
1923	12,594,390	8,756,403	16,416,128	10,622,959	19,804,493	18,818,681	49,498,095	945,295,837
1924	17,473,040	10,975,990	19,482,895	15,495,169	40,100,102	19,937,836	67,427,793	1,058,763,297
1925	16,662,627	13,043,209	21,584,987	20,347,608	29,897,711	12,040,123	81,517,650	1,081,361,643
1926	22,893,264	11,655,670	25,314,991	26,980,699	59,182,272	15,418,236	89,701,926	1,328,700,137
1927	21,401,579	11,593,697	24,031,721	32,510,306	43,467,087	18,975,110	87,241,633	1,267,573,142
1928	20,906,209	12,111,355	24,067,837	26,284,727	46,421,392	14,193,029	88,715,879	1,250,456,297

* 9 months.

No. 4—STATEMENT showing Value of Goods entered for Home Consumption, by Countries

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Netherlands
	$	$	$	$	$	$	$	$
1873	68,522,776	47,735,678	2,023,288	1,099,925	477,886	75,032	52,425	216,628
1874	63,076,437	54,283,072	2,302,500	956,917	458,067	100,544	46,085	256,138
1875	60,347,067	50,805,820	1,941,298	748,423	383,484	66,006	43,958	231,779
1876	40,734,260	46,070,033	1,840,877	482,587	436,034	71,655	40,412	267,079
1877	39,572,239	51,312,669	1,410,732	370,594	278,098	45,465	29,250	202,557
1878	37,431,180	48,631,739	1,385,003	399,326	277,429	41,913	53,310	213,014
1879	30,993,130	43,739,219	1,532,191	440,909	343,849	25,510	33,461	200,575
1880	34,461,224	29,346,948	1,115,841	449,791	236,518	35,767	459,508	171,245
1881	43,583,808	36,704,112	1,631,332	934,266	399,684	56,893	88,726	225,190
1882	50,597,341	48,289,052	2,097,358	1,480,004	462,219	51,912	93,086	248,043
1883	52,052,465	56,032,333	2,316,480	1,809,154	584,972	63,349	104,441	297,201
1884	43,418,015	50,492,826	1,769,849	1,975,771	504,477	67,983	75,348	318,477
1885	41,406,777	47,151,201	1,935,581	2,121,269	349,215	60,366	108,162	337,785
1886	40,601,199	44,858,039	1,975,218	2,155,523	379,465	56,477	106,697	301,972
1887	44,962,233	45,107,066	2,073,470	3,235,449	409,269	58,143	119,889	295,061
1888	39,298,721	48,481,848	2,244,784	3,364,563	374,932	74,576	180,726	331,791
1889	42,317,389	50,537,440	2,228,683	3,692,570	407,268	72,085	126,124	414,080
1890	43,390,241	52,291,973	2,615,602	3,778,993	322,506	84,034	163,486	422,267
1891	42,047,526	53,685,657	2,312,143	3,804,090	488,807	70,537	241,809	389,791
1892	41,348,435	53,137,572	2,402,634	5,583,530	396,173	53,109	341,559	278,288
1893	43,148,413	58,221,976	2,832,117	3,825,763	343,506	52,481	170,564	373,858
1894	38,717,267	53,034,100	2,536,964	5,841,542	389,296	47,106	402,443	344,706
1895	31,131,737	54,634,521	2,585,174	4,794,159	402,479	57,140	381,594	243,900
1896	32,979,742	58,574,024	2,810,942	5,931,459	361,778	46,696	230,917	299,852
1897	29,412,188	61,649,041	2,601,351	6,493,368	386,532	45,592	224,885	376,109
1898	32,500,917	78,705,590	3,975,351	5,584,014	488,787	47,319	421,258	374,047
1899	37,060,123	93,007,166	3,889,295	7,393,456	534,482	63,296	395,599	500,393
1900	44,789,730	109,844,378	4,368,502	8,383,498	560,701	72,785	144,573	579,582
1901	43,018,164	110,485,008	5,398,021	7,021,405	742,539	96,304	327,361	797,462
1902	49,213,762	120,807,050	6,672,194	10,823,169	694,970	129,379	726,742	875,615
1903	58,896,901	137,605,195	6,580,029	12,282,637	823,944	129,192	541,785	1,270,540
1904	61,777,574	150,826,515	6,206,525	8,175,604	865,096	100,713	401,928	916,071
1905	60,342,709	162,738,571	7,059,139	6,695,414	729,259	98,288	620,637	954,653
1906	69,194,588	175,862,071	7,667,987	6,987,314	928,791	128,604	553,755	1,179,892
*1907	64,581,373	155,943,029	6,699,412	5,474,908	886,154	128,084	454,505	1,001,990
1908	94,959,471	210,652,825	9,901,909	8,163,047	1,126,977	147,256	781,497	1,426,335
1909	70,682,944	180,026,550	8,197,435	6,050,365	933,854	122,283	761,339	1,273,121
1910	95,350,300	223,501,809	10,109,544	7,935,230	1,019,775	140,522	893,398	2,009,990
1911	109,936,462	284,934,739	11,563,773	10,047,340	1,154,747	186,380	962,148	1,820,578
1912	116,907,022	356,354,478	11,744,664	11,090,005	1,273,211	259,542	1,146,822	2,423,902
1913	138,749,998	441,141,562	15,379,764	14,214,547	1,258,970	343,249	1,713,585	3,109,554
1914	132,070,876	410,786,091	14,276,535	14,586,223	1,352,133	277,381	2,090,387	3,015,456
1915	80,160,781	428,616,927	8,449,186	5,086,986	977,448	215,608	1,472,799	1,769,256
1916	90,108,795	398,693,720	5,949,470	86,304	617,025	207,634	920,271	1,057,733
1917	121,763,214	677,631,616	6,481,098	14,132	909,546	260,094	1,227,007	1,234,993
1918	81,324,283	791,906,125	5,274,064	27,181	808,807	238,420	771,187	1,054,176
1919	73,035,118	746,920,654	3,632,900	75	697,643	111,689	555,112	495,409
1920	126,359,249	801,100,700	10,630,865	44,255	1,540,548	312,912	999,040	2,266,169
1921	213,973,562	856,176,820	19,138,062	1,547,685	2,317,179	517,222	1,745,330	4,237,791
1922	117,135,343	515,958,196	13,482,005	2,041,016	1,779,408	222,506	1,387,370	4,002,047
1923	141,330,143	540,989,738	12,264,921	2,568,409	1,696,910	124,028	1,601,225	4,970,668
1924	153,586,690	601,256,447	15,767,851	5,382,506	1,666,569	260,401	1,849,844	5,359,980
1925	151,083,946	509,780,009	18,460,625	6,787,611	1,768,222	327,788	1,930,492	5,082,842
1926	163,731,210	608,618,542	19,151,699	9,986,763	2,085,850	348,817	2,597,759	6,864,563
1927	163,939,065	687,022,521	23,992,322	15,030,138	2,220,823	471,026	3,444,062	7,693,668
1928	185,895,857	719,436,237	26,473,732	17,055,798	2,572,150	722,279	4,241,802	8,794,049

*9 months.

No. 4—STATEMENT showing Value of Goods entered for Home Consumption, by Countries—*Concluded*

Fiscal Year	Belgium	New-foundland	West Indies	South America	China and Japan	Switzer-land	Other Countries	Total
	$	$	$	$	$	$	$	$
1873	346,702	1,808,997	2,174,932	416,199	1,663,390	120,514	780,222	127,514,594
1874	293,659	1,088,468	2,307,733	473,530	1,224,506	139,674	396,839	127,404,169
1875	278,311	904,224	2,194,404	278,796	657,426	116,128	621,733	119,618,657
1876	361,055	774,586	1,616,113	287,553	948,239	56,168	746,567	94,733,218
1877	251,812	641,642	1,242,809	4,971	418,606	69,066	449,973	96,300,483
1878	255,694	672,665	1,033,849	15,447	383,676	61,178	344,154	91,199,577
1879	179,031	639,406	1,252,429	4,388	448,962	94,781	413,767	80,341,608
1880	149,086	581,961	2,945,154	283,481	893,911	94,225	557,689	71,782,349
1881	412,834	652,304	3,815,147	637,620	1,410,973	141,789	916,926	91,611,604
1882	503,210	493,509	4,023,384	1,373,617	1,529,042	268,093	1,139,057	112,648,927
1883	415,407	765,935	4,369,260	1,464,671	1,645,254	336,040	880,057	123,137,019
1884	459,150	780,670	3,606,917	1,478,988	1,909,562	242,380	1,080,231	108,180,644
1885	479,260	351,105	3,162,774	1,340,836	2,493,451	217,666	1,189,571	102,710,019
1886	510,907	384,321	3,144,472	1,100,995	2,432,585	203,085	1,391,739	99,602,694
1887	703,851	354,342	1,942,182	1,198,406	2,750,388	219,777	2,209,902	105,639,428
1888	488,743	421,599	3,268,663	876,603	2,128,707	193,838	1,117,006	102,847,100
1889	530,740	488,161	3,378,654	1,324,588	1,964,538	166,890	2,025,237	109,673,447
1890	721,332	469,711	3,089,048	1,003,962	2,100,065	316,523	1,995,841	112,765,584
1891	655,448	751,003	3,238,156	719,778	2,123,311	244,319	2,572,749	113,345,124
1892	517,032	753,249	4,092,287	877,821	3,016,857	192,365	3,988,029	116,978,943
1893	599,511	653,270	4,244,669	772,613	2,425,572	258,464	3,782,253	121,705,030
1894	550,237	814,562	3,677,411	872,392	2,254,919	274,825	3,066,216	113,093,983
1895	441,617	739,850	4,794,020	469,172	2,528,414	259,400	1,789,334	105,252,511
1896	920,758	551,412	1,896,426	567,027	2,671,418	332,120	2,413,009	110,587,480
1897	1,163,632	452,076	1,678,870	620,250	2,396,409	222,173	3,571,545	111,294,021
1898	1,230,110	464,324	1,080,266	1,425,653	2,317,971	349,678	1,732,721	130,698,006
1899	2,318,723	527,006	1,354,939	1,175,584	2,769,499	568,768	2,493,264	154,051,593
1900	3,223,918	660,678	1,331,776	992,887	2,381,144	529,176	2,940,988	180,804,316
1901	3,828,450	625,568	1,801,740	1,048,088	2,450,022	602,658	2,995,198	181,237,988
1902	1,711,599	1,117,400	2,173,835	1,659,074	1,984,876	765,010	3,436,920	202,791,595
1903	2,800,182	1,197,581	2,379,275	1,989,952	1,939,942	944,727	4,408,634	233,790,516
1904	3,129,513	1,076,667	4,813,815	3,157,004	2,565,976	1,389,000	6,062,331	251,464,332
1905	1,775,187	1,054,613	5,638,187	4,035,619	2,470,723	1,766,991	5,945,564	261,925,554
1906	2,610,072	1,758,425	6,591,083	5,869,075	2,217,517	2,012,405	6,799,228	290,360,807
*1907	1,695,179	1,463,731	3,406,723	5,229,818	2,110,719	1,604,692	6,574,479	257,254,882
1908	2,380,649	1,777,469	8,300,501	3,088,060	2,905,298	2,734,779	10,082,543	358,428,616
1909	1,901,588	1,638,428	8,092,303	4,783,893	2,626,736	2,188,265	8,926,853	298,205,957
1910	3,239,888	1,467,619	7,366,564	6,217,105	2,981,494	2,603,858	11,025,920	375,833,016
1911	3,614,354	1,818,260	9,035,863	7,334,136	3,106,138	3,102,910	13,333,490	461,951,318
1912	3,686,419	1,841,887	8,490,878	10,533,310	3,112,982	3,458,006	15,159,062	547,482,190
1913	4,020,178	2,056,974	10,576,966	10,528,857	4,256,301	4,296,702	23,869,838	675,517,045
1914	4,490,476	1,841,351	11,503,984	9,020,157	3,517,478	4,314,805	20,549,116	633,692,449
1915	1,875,963	1,245,160	11,088,894	9,594,128	3,825,848	3,979,256	19,081,064	587,439,304
1916	59,315	1,577,784	11,878,121	12,730,408	4,933,735	3,525,117	19,731,929	542,077,361
1917	14,896	2,147,808	18,744,704	13,306,837	9,251,077	4,499,321	15,951,083	873,437,426
1918	12,973	2,947,527	18,252,381	12,278,387	13,592,209	3,146,482	30,909,544	962,543,746
1919	6,270	3,098,834	16,300,764	13,437,101	15,572,588	1,780,812	40,784,366	916,429,335
1920	911,407	2,146,414	40,539,737	19,097,293	14,842,516	7,758,051	35,978,967	1,064,528,123
1921	4,693,368	2,886,203	53,317,859	19,356,073	13,258,170	14,143,448	32,850,110	1,240,158,882
1922	3,845,718	1,392,026	25,265,911	17,724,031	9,608,208	8,671,608	25,288,939	747,804,332
1923	4,994,787	1,398,726	29,827,826	16,106,651	8,671,707	7,726,656	28,306,849	802,579,244
1924	5,344,773	1,474,920	33,576,604	16,818,490	9,018,573	8,420,673	33,582,546	893,366,867
1925	5,067,866	1,643,162	25,460,658	20,095,731	9,514,936	7,801,575	32,127,074	796,932,537
1926	6,953,173	1,615,132	28,037,625	17,183,908	12,112,069	7,462,608	40,579,014	927,328,732
1927	9,663,308	1,868,601	28,634,810	19,961,045	16,211,972	9,491,779	41,247,365	1,030,892,505
1928	9,898,237	2,097,525	26,137,740	32,387,330	15,077,826	8,595,677	49,570,227	1,108,956,466

*9 months.

No. 5—Statement showing Duty collected by Countries

Fiscal Year	United Kingdom	United States	France	Germany	Spain	Portugal	Italy	Netherlands
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1873...	7,398,460 17	2,966,119 34	627,831 95	334,415 51	102,711 21	21,245 21	9,320 80	294,569 02
1874...	7,867,481 41	3,695,564 03	744,059,19	272,234 68	112,918 73	27,674 63	13,626 76	361,153 47
1875...	8,881.997 81	3,860,877 10	604,092 47	173,427 65	113,599 78	28,421 97	8,502 45	394,017 97
1876...	6,075,759 82	4,117,223 40	723,368 24	134,282 11	157,287 53	29,302 21	24,629 25	459,887 53
1877...	6,377,596 23	4,426,394 79	480,340 56	75,762 93	79,515 38	20,322 20	15,783 10	316,156 00
1878...	6,445,995 38	4,794,599 63	400,600 04	79,673 10	87,755 88	13,452 55	19,652 43	308,153 30
1879...	5,561,933 02	5,529,150 64	501,747 90	104,211 80	120,385 81	7,970 14	19,474 58	320,634 07
1880...	6,737,977 05	4,521,311 08	427,937 89	103,156 82	106,720 56	14.935 79	30,031 12	301,570 50
1881...	8.772,949 97	5,657,292 75	597,948 79	215,108 04	167,412 55	25,307 99	40,956 25	372,335 63
1882...	10,011,811 00	7,082,722 29	742,774 93	338,691 39	210.766 86	29,105 63	34,283 98	420,607 91
1883...	9,897,785 16	8,158,023 35	824,963 17	388,556 85	231,866 95	38,135 50	44,240 03	535,741 81
1884...	8,001,370 74	7,420,461 79	645,152 71	554,181 88	192,946 21	34,228 80	32,186 80	493,807 39
1885...	7,617,249 45	6,636,405 83	650,515 29	572,947 24	154,680 24	29,345 65	33,380 25	521.318 20
1886...	7,817,357 45	6,790,080 76	735,666 52	588.168 44	150,268 47	30,510 74	35,667 84	602,570 19
1887...	9,318,920 08	7,299,591 68	699,840 07	1,190,267 30	176,449 17	33,329 81	31,404 53	623,894 26
1888...	8,972,739 84	7,131,006 28	796,242 70	1,214,748 15	171,790 38	36,621 03	42,004 78	704,034 45
1889...	9,405,243 70	7,413,354 83	854,805 00	1,266,638 56	185,969 33	36,805 32	32,456 70	756,785 89
1890...	9,576,965 75	8,220,299 55	957,312 22	1,165,158 67	170,028 06	36,528 91	37,938 11	806,261 40
1891...	9,114,271 75	7,709,318 12	932,032 53	1,320,583 23	217,612 94	30,680 47	44,888 99	741,462 43
1892...	9,074,200 71	7,814,666 93	931,044 99	783,740 50	186,168 39	27,446 98	35,846 83	697,184 17
1893...	9,498,747 08	7,636,075 81	1.058,095 75	857,264 35	180,132 25	27,171 69	30,816 89	815,200 70
1894...	8,245,845 87	6,960,950 68	1,019,568 12	978,224 53	207,724 63	22,894 36	49,073 63	879,107 85
1895...	7,006,676 58	6,897,395 04	985,945 87	892,547 04	187,788 45	24,361 92	46,697 12	755,251 48
1896...	7.358,514 15	7,767,992 63	1.020,804 74	1.329,186 36	162,118 81	22,269 68	39,386 02	792,609 63
1897...	6,205,366 80	8,147,075 10	969.539 64	1,489,755 60	150,587 43	23,191 61	33,474 05	920,096 46
1898...	6,649,428 60	9,941,624 48	1.183,890 30	1,364,159 04	176,764 64	20,606 24	46,466 82	908,046 37
1899...	7,328,191 92	11,713,858 94	1,300,876 33	1,903,223 16	181.346 14	25,559 36	52,842 44	1,061,622 69
1900...	8,074,541 07	13,491,872 86	1,428,019 46	2,189,798 17	183,147 59	28,548 59	26,842 73	1,171,550 06
1901...	7,845,406 49	13,411,749 58	1,794,555 55	1,811,974 55	191.527 27	37,138 80	45,171 84	1,350,098 08
1902...	8,424,693 04	15,155,136 39	2,163,016 40	2,741,263 29	205,803 43	42,700 86	88,174 27	1,306,967 57
1903...	9,841,627 33	17,069,881 19	2,098,633 61	3,255,121 88	212,104 39	45,912 40	87,457 75	1,527,113 35
1904...	10,338,017 31	19,554,585 54	2,113,667 94	2,172,571 04	228,532 66	41,226 25	88,831 12	1,726,681 98
1905...	11,171,010 04	20,580,361 56	2,224,967 73	1,826,789 33	216,933 42	39,295 27	123,388 07	1,570,378 88
1906...	12,944,249 35	22,187,102 94	2,520,034 97	1,852,538 47	289,363 62	44,716 82	118,725 17	1,620,711 72
*1907..	11,823,197 06	19,084,738 46	2,219,577 38	1,521,946 23	197,483 36	43,941 45	91,853 92	1,309,895 96
1908...	17,265,293 25	27,132,543 26	3,331,350 36	2,434,631 34	301,055 23	54,079 21	126,376 10	1,812,404 99
1909...	13,449,341 99	22,526,806 65	2,801,383 52	1,709,641 79	255,514 39	48,470 49	112,251 96	1,731,470 46
1910...	18,032,629 10	29,515,836 43	3,269,278 92	1,934,523 03	290,268 99	45,590 34	156,168 96	1,875,408 97
1911...	20,756,810 71	37.854,727 80	3,342,954 67	2,153,180 04	237,265 35	75,334 02	175,984 52	2,052,451 84
1912...	22,367,039 82	49,177,584 32	3,436,947 88	2,246,745 17	334,321 59	90,568 14	197,252 39	2,254,024 52
1913...	27,158,162 29	68,929,805 04	4,141,150 64	2,881,497 00	245,919 50	119,061 09	315,391 84	2,570,778 05
1914...	25,816,854 15	61,895,167 68	4,223,138 30	3,114,324 84	250,904 64	113,335 74	383,037 75	2,755,883 50
1915...	18,447,534 18	42,335,574 74	2,900,280 46	1,089,038 74	189,612 71	87,207 21	279,181 33	2,277,291 85
1916...	14,782,858 14	49,908,888 80	2,053,019 90	13,319 28	130,859 23	81,588 45	183,779 26	1,820,520 79
1917...	18,801,123 35	75,516,313 64	1,909,617 93	3,338 02	168,360 18	87,295 25	233,380 58	1,154,834 68
1918...	14,077,045 20	88,018,758 84	1,514,316 82	6,408 39	171,714 82	68,999 65	155,635 27	594,803 69
1919...	11,164,989 99	87,079,923 49	1,041,795 76	69 20	17,494 76	29,761 47	94,969 56	137,543 82
1920...	20,563,024 47	112,359,727 73	2,118,122 55	11,019 34	222,558 80	56,303 41	159,539 54	469,554 53
1921...	35,615,766 2	110,366,769 74	4,360,667 54	135,890 10	377,423 20	110,965 74	312,631 00	2,279,379 89
1922...	23,585,155 14	71,864,841 71	3.503,657 16	229,948 22	320,168 17	47,747 09	208,488 61	1,188,703 33
1923...	28,424,485 40	74,779,233 75	3,446 706 01	331,728 59	348,850 51	38,302 55	231,478 54	1,216,114 49
1924...	28,136,459 19	79,345,249 74	5,390,368 21	1.138,208 78	478,617 53	105,923 85	314 405 09	1,308,160 02
1925...	27,543,640 17	66,317,496 83	5,717,901 99	1,477,362 18	486,044 58	158,446 33	336,082 17	1,292,850 06
1926...	30,134,249 71	80,816,739 34	6,102,174 95	1,985,471 43	417,015 31	161,583 62	458,972 92	1,215,817 95
1927...	32,330,634 01	90,779,661 28	7,666,059 92	3,002,776 56	468,576 73	185,384 24	693,044 42	1,003,180 79
1928...	38,377,522 19	97,124,431 08	9,135,133 59	3,690,687 07	529,364 24	274,442 34	783,745 77	1,561,979 38

*9 months.

No. 5—STATEMENT showing Duty Collected by Countries—*Continued*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Additional duties, post entries over-collections, War Tax	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1873	94,504 87	97,147 31	831,930 86	182,660 70	157 95	15,994 95	40,660 23	.....	13,017,730 17
1874	51,171 82	54,929 33	935,653 11	194,325 88	26,185 10	21,950 85	42,953 77	.....	14,421,882 67
1875	42,489 19	12,584 62	926,463 33	124,963 29	83,469 42	20,917 93	85,557 14	.....	15,361,382 12
1876	61,407 14	4,890 45	603,819 86	120,843 58	132,042 28	10,274 57	178,096 41	.....	12,833,114 48
1877	50,106 26	9,735 83	435,718 43	1,834 11	68,261 35	12,387 96	178,535 96	.....	12,548,451 09
1878	45,144 82	4,921 23	341,240 28	6,874 10	113,447 24	9,855 02	124,338 17	.....	12,795,693 17
1879	45,107 35	3,230 76	454,872 58	2,591 84	127,283 34	16,597 54	115,349 29	.....	12,939,540 66
1880	41,886 44	3,168 48	1,305,495 00	161,936 81	207,920 61	18,764 19	156,016 88	.....	14,138,849 22
1881	90,250 84	3,251 22	1,584,622 00	280,009 74	348,466 71	33,740 02	311,133 47	.....	18,500,785 97
1882	119,492 16	1,781 73	1,615,945 44	504,255 74	178,499 40	65,780 72	352,318 25	.....	21,708,837 43
1883	106,234 50	7,365 17	1,770,682 99	692,562 12	157,516 29	81,492 95	239,042 13	.....	23,172,308 97
1884	103,953 96	4,158 34	1,397,926 55	688,702 68	273,708 37	65,966 92	265,210 23	.....	20,164,963 37
1885	121,660 61	2,268 61	1,327,363 99	655,708 66	450,153 25	51,863 04	308,698 01	.....	19,133,558 99
1886	132,116 62	2,467 99	1,384,327 91	503,735 53	148,098 67	49,052 66	478,033 91	.....	19,448,123 70
1887	166,445 16	1,624 70	968,496 12	848,562 83	222,799 93	59,393 20	828,686 99	.....	22,469,705 83
1888	117,228 81	3,211 68	1,831,368 64	641,854 29	162,844 61	43,788 82	340,166 62	.....	22,209,641 53
1889	122,116 44	1,087 36	1,727,816 27	849,431 97	185,782 89	38,653 78	845,532 61	7,952 63	23,784,523 23
1890	150,349 40	3,386 14	1,223,589 61	559,312 13	216,956 50	79,331 47	804,400 21	7,089 94	24,014,908 07
1891	126,180 23	3,452 92	1,337,754 14	260,102 71	265,198 43	63,161 46	1,215,178 05	9,190 73	23,481,069 13
1892	104,003 88	4,191 49	272,167 34	75,439 20	273,256 10	49,388 45	201,112 48	20,723 09	20,550,581 53
1893	112,081 99	1,494 56	314,148 32	78,592 25	313,798 23	70,418 15	160,133 95	7,538 96	21,161,710 93
1894	119,020 54	1,623 12	292,464 66	73,489 61	273,712 97	73,695 14	172,318 29	10,108 32	19,379,822 32
1895	93,303 46	1,053,95	380,955 12	68,786 81	230,890 41	72,742 85	231,349 72	14,523 65	17,887,269 47
1896	192,457 64	1,197,81	478,829 02	106,494 83	265,572 02	93,877 62	521,413 34	64,312 97	20,219,037 32
1897	250,770 38	1,274 89	454,418 06	109,914 69	267,575 35	64,153 55	757,363 19	47,439 87	19,891,996 77
1898	287,411 60	1,690 86	304,971 01	9,761 63	291,747 74	91,525 82	328,978 26	350,715 08	22,157,788 49

No. 5—STATEMENT showing Duty Collected by Countries—*Concluded*

Fiscal Year	Belgium	Newfoundland	West Indies	South America	China and Japan	Switzerland	Other Countries	Additional duties, post entries, over-collections, War Tax	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1899	663,898 07	1,669 28	374,161 69	97,167 56	349,381 86	156,108 44	414,930 52	109,390 35	25,734,228 75
1900	916,374 13	2,740 46	363,563 81	120,148 16	279,351 97	143,983 86	414,866 20	53,760 91	28,889,110 13
1901	1,081,162 82	1,180 88	471,923 66	205,344 97	341,473 58	159,147 86	416,207 47	43,006 49	29,106,979 89
1902	387,008 06	7,023 17	550,252 39	199,921 52	370,966 45	199,638 08	509,973 06	72,994 33	32,425,532 31
1903	602,178 47	1,914 12	684,985 96	303,880 29	355,971 92	255,250 99	680,547 56	87,773 38	37,110,354 59
1904	444,514 69	2,780 11	1,202,659 24	731,277 80	444,747 26	376,616 39	873,447 83	114,191 98	40,954,349 14
1905	321,094 73	2,435 99	1,184,429 72	591,697 60	489,814 72	469,943 37	982,112 49	229,747 00	42,024,339 92
1906	511,584 66	1,092 68	1,531,148 25	712,435 40	483,583 62	546,901 63	1,070,251 05	233,660 83	46,671,101 18
*1907	261,262 94	1,153 91	692,072 94	809,020 77	376,798 58	415,707 02	977,657 28	163,864 53	40,290,171 70
1908	375,296 31	4,146 35	615,082 47	474,074 29	525,328 90	733,350 11	2,846,353 13	286,708 68	58,331,074 04
1909	357,745 34	2,549 89	1,642,462 43	700,185 39	416,616 80	591,501 16	1,458,936 73	254,912 94	48,059,791 93
1910	520,726 06	8,364 10	1,575,328 09	831,853 03	435,600 94	630,135 47	1,578,994 86	314,531 92	61,024,239 21
1911	539,675 14	5,819 21	1,954,632 33	882,791 71	430,014 82	644,991 93	1,829,013 33	376,728 67	73,312,367 59
1912	521,234 65	3,077 98	2,070,708 91	1,238,183 43	451,158 58	718,800 23	2,045,932 94	522,446 97	87,576,036 52
1913	574,815 34	2,781 43	2,370,130 38	1,100,637 88	708,201 11	882,861 51	2,500,478 11	562,016 72	115,063,687 93
1914	618,893 63	4,313 81	2,755,822 67	1,095,047 81	553,856 80	900,781 99	2,123,206 25	586,008 77	107,180,578 33
1915	266,119 46	3,491 70	3,187,995 15	1,806,369 45	439,642 65	845,898 52	1,933,070 02	3,117,602 10	79,205,910 27
1916	13,297 01	68,345 89	3,672,837 99	2,781,485 91	639,804 01	734,943 00	1,336,202 54	25,718,350 66	103,940,100 86
1917	1,620 10	83,810 42	4,318,005 94	2,790,671 39	1,805,022 88	904,796 62	1,387,994 63	38,456,269 32	147,631,454 93
1918	87 11	73,979 57	4,017,803 98	2,609,282 59	2,530,134 05	594,563 01	1,346,001 97	45,816,093 55	161,595,628 51
1919	206 20	72,670 06	3,158,994 50	2,654,078 58	2,715,490 23	297,041 01	3,888,685 49	45,592,623 75	158,046,333 87
1920	138,363 80	4,987 65	7,688,536 32	2,733,804 22	3,138,343 34	1,540,820 39	3,982,656 16	32,336,819 52	187,524,181 77
1921	665,462 63	17,845,02	7,429,689 48	2,060,142 22	2,978,441 12	3,248,028 90	3,373,257 27	6,335,323 15	179,667,683 12
1922	435,772 60	14,399 98	7,500,795 96	3,420,645 94	2,502,473 93	2,160,749 67	3,711,558 05	792,288 34	121,487,393 90
1923	657,228 10	24,334 56	12,390,210 71	2,567,820 97	2,269,553 67	1,938,371 35	4,377,830 58	761,120 34	133,803,370 12
1924	736,546 01	39,217 51	6,007,949 80	1,995,065 17	2,139,705 95	2,147,670 55	4,916,353 90	922,443 46	135,122,344 76
1925	677,926,36	31,177 78	4,883,665 28	1,660,651 70	2,240,044 62	1,864,152 82	4,662,853 05	872,157 78	120,222,453 70
1926	908,732 95	18,580 00	10,341,391 19	1,240,458 68	2,873,714 10	1,813,210 07	4,560,321 46	884,676 39	143,933,110 07
1927	1,336,604 59	21,730 26	8,137,953 94	1,173,159 24	3,354,345 87	2,298,132 91	5,060,868 92	1,454,253 35	158,966,367 03
1928	1,432,763 16	26,138 94	4,781,557 95	1,548,290 50	3,490,940 94	2,022,455 76	5,462,422 64	1,630,892 45	171,872,768 00

No. 6—STATEMENT showing Percentage of Duty on Total Value of Goods entered for Home Consumption, Dutiable and Free; and percentage of expenses of collection of Customs Revenue in the Dominion of Canada, during each year from 1868 to 1928, inclusive.

Year	Percentage of duty on Total Value of Goods entered for Home Consumption Dutiable and Free	Percentage Expense of Collection of Customs Revenue
	p.c.	p.c.
1868	12·25	05·09
1869	12·31	07·09
1870	13·28	05·41
1871	13·62	04·21
1872	12·11	04·04
1873	10·20	04·35
1874	11·32	04·55
1875	12·83	04·44
1876	13·44	05·61
1877	13·03	05·75
1878	14·03	05·58
1879	16·10	05·56
1880	19·70	05·04
1881	20·19	03·87
1882	19·27	03·33
1883	18·82	03·26
1884	18·64	03·96
1885	18·61	04·14
1886	19·50	04·10
1887	21·24	03·64
1888	21·57	03·81
1889	21·65	03·62
1890	21·21	03·63
1891	20·06	03·83
1892	17·56	04·39
1893	17·38	04·26
1894	17·13	04·75
1895	16·99	05·13
1896	18·28	04·43
1897	17·87	04·73
1898	16·95	04·37
1899	16·70	04·02
1900	15·98	03·71
1901	16·06	03·86
1902	15·99	03·62
1903	15·87	03·31
1904	16·28	03·31
1905	16·04	03·49
1906	16·07	03·31
*1907	15·66	03·04
1908	16·27	03·30
1909	16·11	04·15
1910	16·24	03·31
1911	15·87	02·98
1912	16·00	02·78
1913	17·03	02·74
1914	16·91	03·59
†1915	17·39	04·77
†1916	20·47	03·55
†1917	17·46	02·54
†1918	16·79	02·51
†1919	17·24	03·13
†1920	17·61	02·49
†1921	14·49	03·36
††1922	16·25	03·22
†1923	16·67	02·58
†1924	15·13	02·49
†1925	15·08	03·09
†1926	15·52	02·83
†1927	13·96	02·66
†1928	15·49	03·09

*9 months. †Exclusive of coin and bullion, and including war tax. ††Percentage expense of collection, calculated on total Customs and Excise Revenue in 1922 and subsequent years.

No. 7—COMPARATIVE STATEMENT of the Values of the Imports entered for fiscal year from 1868 to 1928; showing also percentage excess of Imports entered for Home Consumption

—	Imports entered for Home Consumption				Exports			
	Merchandise		Coin and Bullion	Totals	Merchandise		Coin and Bullion	Totals
	Dutiable	Free			Produce	Non-Produce		
	$	$	$	$	$	$	$	$
1868.....	43,655,696	23,434,463	4,895,147	71,985,306	48,504,899	4,196,821	4,866,168	57,537,888
1869.....	41,069,342	22,085,599	4,247,229	67,402,170	52,400,772	3,855,801	4,218,208	60,474,781
1870.....	45,127,422	21,774,652	4,335,529	71,237,603	59,043,590	6,527,622	8,002,278	73,573,490
1871.....	60,094,362	24,120,026	2,733,094	86,947,482	57,630,024	9,853,244	6,690,350	74,173,618
1872.....	68,276,157	36,679,210	2,753,749	107,709,116	65,831,083	12,798,182	4,010,398	82,639,663
1873.....	71,198,176	53,310,953	3,005,465	127,514,594	76,538,025	9,405,910	3,845,987	89,789,922
1874.....	76,232,530	46,948,357	4,223,282	127,404,169	76,741,997	10,614,096	1,995,835	89,351,928
1875.....	78,138,511	39,270,057	2,210,089	119,618,657	69,709,823	7,137,319	1,039,837	77,886,979
1876.....	60,238,297	32,274,810	2,220,111	94,733,218	72,491,437	7,234,961	1,240,037	80,966,435
1877.....	60,916,770	33,209,624	2,174,089	96,300,483	68,030,546	7,111,108	733,739	75,875,393
1878.....	59,773,039	30,622,812	803,726	91,199,577	67,989,800	11,164,878	168,989	79,323,667
1879.....	55,426,836	23,275,683	1,639,089	80,341,608	62,431,025	8,355,644	704,586	71,491,255
1880.....	54,182,967	15,717,575	1,881,807	71,782,349	72,899,697	13,240,006	1,771,755	87,911,458
1881.....	71,620,725	18,867,604	1,123,275	91,611,604	83,944,701	13,375,117	971,005	98,290,823
1882.....	85,757,433	25,387,751	1,503,743	112,648,927	94,137,657	7,628,453	371,093	102,137,203
1883.....	91,588,339	30,273,157	1,275,523	123,137,019	87,702,431	9,751,773	631,600	98,085,804
1884.....	80,010,498	25,962,480	2,207,666	108,180,644	79,833,098	9,389,106	2,184,292	91,406,496
1885.....	73,269,618	26,486,157	2,954,244	102,710,019	79,131,735	8,079,646	2,026,980	89,238,361
1886.....	70,658,819	25,333,318	3,610,557	99,602,694	77,756,704	7,438,079	56,531	85,251,314
1887.....	78,120,679	26,986,531	532,218	105,639,428	80,960,909	8,549,333	5,569	89,515,811
1888.....	69,645,824	31,025,804	2,175,472	102,847,100	81,382,072	8,803,394	17,534	90,203,000
1889.....	74,475,139	34,623,057	575,251	109,673,447	80,722,456	6,938,455	1,978,256	89,189,167
1890.....	77,106,286	34,576,287	1,083,011	112,765,584	85,257,586	9,051,781	2,439,782	96,749,149
1891.....	74,536,036	36,997,918	1,811,170	113,345,124	88,671,738	8,798,631	946,927	98,417,296
1892.....	69,160,737	45,999,676	1,818,530	116,978,943	99,032,466	13,121,791	1,809,118	113,963,375
1893.....	69,873,571	45,297,259	6,534,200	121,705,030	105,488,798	8,941,856	4,133,698	118,564,352
1894.....	62,779,182	46,291,729	4,023,072	113,093,983	103,851,764	11,833,805	1,839,380	117,524,949
1895.....	58,557,655	42,118,236	4,576,620	105,252,511	102,828,441	6,485,043	4,325,319	113,638,803
1896.....	67,239,759	38,121,402	5,226,319	110,587,480	109,707,805	6,606,738	4,699,309	121,013,852
1897.....	66,220,765	40,397,062	4,676,194	111,294,021	123,632,540	10,825,163	3,492,550	137,950,253
1898.....	74,625,088	51,682,074	4,390,844	130,698,006	144,548,662	14,980,883	4,623,138	164,152,683
1899.....	89,433,172	59,989,244	4,629,177	154,051,593	137,360,792	17,520,088	4,016,025	158,896,905
1900.....	104,346,795	68,304,881	8,152,640	180,804,316	168,972,301	14,265,254	8,657,168	191,894,723
1901.....	105,969,756	71,961,163	3,307,069	181,237,988	177,431,386	17,077,757	1,978,489	196,487,632
1902.....	118,657,496	78,080,308	6,053,791	202,791,595	196,019,763	13,951,101	1,669,422	211,640,286
1903.....	136,796,065	88,298,744	8,695,707	233,790,516	214,401,674	10,828,087	619,963	225,849,724
1904.....	148,909,576	94,999,839	7,554,917	251,464,332	198,414,439	12,641,239	2,465,557	213,521,236
1905.....	150,928,787	101,035,427	9,961,340	261,925,554	190,854,946	10,617,115	1,844,811	203,316 872
1906.....	173,046,109	110,694,171	6,620,527	290,360,807	235,483,956	11,173,846	9,928,828	256,586,630
*1907....	152,065,529	98,160,306	7,029,047	257,254,882	180,545,306	11,541,927	13,189,964	205,277,197
1908.....	218,160,047	134,380,832	5,887,737	358,428,616	246,960,968	16,407,984	16,637,654	280,006,606
1909.....	175,014,160	113,580,036	9,611,761	298,205,957	242,603,584	17,318,782	1,589,793	261,512,159
1910.....	227,264,346	143,053,853	5,514,817	375,833,016	279,247,551	19,516,442	2,594,536	301,358,529
1911.....	282,723,812	170,000,791	9,226,715	461,951,318	274,316,553	15,683,657	7,196,155	297,196,365
1912.....	335,304,060	187,100,615	25,077,515	547,482,190	290,223,857	17,492,294	7,601,099	315,317,250
1913.....	441,606,885	229,600,349	4,309,811	675,517,045	355,754,600	21,313,755	16,163,702	393,232,057
1914.....	410,258,744	208,935,254	14,498,451	633,692,449	431,588,439	23,848,785	23,560,704	478,997,928
1915.....	279,792,195	176,163,713	131,483,396	587,439,304	409,418,836	52,023,673	29,366,368	490,808,877
1916.....	289,366,527	218,834,607	33,876,227	542,077,361	741,610,638	37,689,432	103,572,432	882,872,502
1917.....	461,733,609	384,717,269	26,986,548	873,437,426	1,151,375,768	27,835,332	196,547,048	1,375,758,148
1918.....	542,341,522	421,191,056	11,290,341	974,822,919	1,540,027,788	46,142,004	3,491,403	1,589,661,195
1919.....	526,494,658	393,217,047	.....	916,429,335	1,216,443,806	52,321,479	.....	1,268,765,285
1920.....	693,655,165	370,872,958	.....	1,064,528,123	1,239,492,098	47,166,611	.....	1,286,658,709
1921.....	847,561,406	392,597,476	7,218,775	1,240,158,882	1,189,163,701	21,264,418	34,184,673	1,210,428,119
1922.....	495,636,323	252,178,009	4,788,246	747,804,332	740,240,680	13,686,329	23,337,331	753,927,009
1923.....	537,258,782	265,320,462	26,455,231	802,579,244	931,451,443	13,844,394	27,548,866	945,295,837
1924.....	591,299,094	302,067,773	3,496,705	893,366,867	1,045,351,056	13,412,241	25,445,830	1,058,763,297
1925.....	516,014,455	280,918,082	4,142,292	796,932,537	1,069,067,353	12,294,290	4,919,973	1,081,361,643
1926.....	583,051,670	344,277,062	51,437,859	927,328,732	1,315,355,791	13,344,346	71,122,711	1,328,700,137
1927.....	659,897,013	370,995,492	46,086,458	1,030,892,505	1,252,157,506	15,415,636	45,052,210	1,267,573,142
1928.....	710,050,228	398,906,238	31,308,807	1,108,956,466	1,228,207,606	22,248,691	61,886,967	1,250,456,297

*9 months.

Home Consumption and Exports into and from the Dominion of Canada in each entered for Home Consumption over Exports or of Exports over Imports in each year.

Excess Value of Merchandise imported for Home Consumption over		Excess of total Exports over total Imports entered for Home Consumption including Coin and Bullion	Percentage Excess of Total Imports entered for Home Consumption over total Exports including Coin and Bullion	Percentage Excess of Total Exports over total Imports entered for Home Consumption including Coin and Bullion	Percentage, Increase or Decrease				—
					Gross Imports entered for Home Consumption compared with preceding year		Gross Exports compared with preceding year		
Merchandise Exported — Produce	Merchandise Exported — Produce and non-Produce				Increase	Decrease	Increase	Decrease	
$	$	$	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	
18,585,260	14,388,439	.....	25·04	.....	.....	.....	.....	.....	1868
10,754,169	6,898,368	.....	11·5	.....	.....	6·4	5·05	.....	1869
7,858,484	1,330,862	2,335,887	.....	3·3	5·7	.....	21·7	.....	1870
26,554,364	16,731,120	.....	17·2	.....	22·05	.....	0·8	.....	1871
39,124,284	26,326,102	.....	30·3	.....	23·9	.....	11·4	.....	1872
47,971,104	38,565,194	.....	42·01	.....	18·4	.....	8·6	.....	1873
46,438,890	35,824,794	.....	42·6	.....	.....	00·09	.....	00·5	1874
47,698,745	40,561,426	.....	53·6	.....	.....	00·6	.....	12·8	1875
20,021,670	12,786,709	.....	17·0	.....	.....	20·8	3·9	.....	1876
26,095,848	18,984,740	.....	27·05	.....	1·7	.....	.....	6·3	1877
22,406,051	11,241,173	.....	14·9	.....	.....	5·3	4·5	.....	1878
16,271,494	7,915,850	.....	12·4	.....	.....	11·9	.....	9·9	1879
.....	.....	16,129,109	.....	22·5	.....	10·7	22·9	.....	1880
6,543,628	.....	6,679,219	.....	7·3	27·6	.....	11·8	.....	1881
17,007,527	9,379,074	.....	10·3	.....	22·9	.....	3·9	.....	1882
34,159,065	24,407,292	.....	25·5	.....	9·3	.....	.....	3·9	1883
26,139,880	16,750,774	.....	18·4	.....	.....	12·1	.....	6·8	1884
20,624,040	12,544,394	.....	15·1	.....	.....	5·06	.....	2·4	1885
18,235,433	10,797,35[illegible]	.....	16·8	.....	.....	3·03	.....	4·5	1886
24,146,301	15,596,968	.....	18·01	.....	6·06	.....	5·0	.....	1887
19,289,556	10,486,162	.....	14·02	.....	.....	2·6	00·7	.....	1888
28,825,740	21,887,285	.....	22·9	.....	6·6	.....	.....	1·1	1889
26,424,987	17,373,206	.....	16·6	.....	2·8	.....	8·5	.....	1890
22,862,216	14,063,585	.....	15·2	.....	00·5	.....	1·7	.....	1891
16,127,947	3,006,156	.....	2·7	.....	3·2	.....	15·8	.....	1892
9,682,032	740,176	.....	2·6	.....	4·04	.....	4·04	.....	1893
5,219,147	.....	4,430,966	.....	3·9	.....	7·08	.....	00·9	1894
.....	.....	8,386,292	.....	7·9	.....	6·9	.....	3·3	1895
.....	.....	10,426,372	.....	9·4	5·07	.....	6·5	.....	1896
.....	.....	26,656,232	.....	23·9	00·6	.....	13·9	.....	1897
.....	.....	33,454,677	.....	25·6	17·4	.....	18·9	.....	1898
11,985,667	.....	4,845,312	.....	3·2	17·9	.....	.....	3·2	1899
3,534,577	.....	11,090,407	.....	6·1	17·4	.....	20·8	.....	1900
269,306	.....	15,249,644	.....	8·4	00·2	.....	2·4	.....	1901
460,427	.....	8,848,691	.....	4·4	11·9	.....	7·7	.....	1902
10,412,045	.....	.....	3·5	.....	15·3	.....	6·7	.....	1903
15,175,580	32,534,341	.....	17·7	.....	7·6	.....	.....	5·5	1904
60,762,623	50,145,508	.....	28·8	.....	4·2	.....	.....	4·8	1905
47,798,248	36,624,402	.....	13·2	.....	10·9	.....	26·2	.....	1906
69,192,568	57,650,641	.....	25·3	.....	.....	11·4	.....	19·9	1907
104,918,987	88,511,003	.....	24·4	.....	39·3	.....	36·4	.....	1908
45,613,931	28,295,149	.....	14·0	.....	.....	16·9	.....	6·6	1909
90,567,876	71,051,434	.....	24·7	.....	26·03	.....	15·2	.....	1910
177,428,555	161,744,898	.....	55·4	.....	22·9	.....	.....	1·4	1911
231,224,452	213,732,158	.....	73·9	.....	18·5	.....	3·09	.....	1912
314,334,466	293,020,711	.....	71·7	.....	23·4	.....	24·7	.....	1913
186,868,705	163,019,920	.....	32·3	.....	.....	6·2	21·8	.....	1914
46,027,476	.....	.....	19·7	.....	.....	7·3	2 5	.....	1915
.....	.....	340,795,141	.....	62·9	.....	7·7	79·9	.....	1916
.....	.....	502,320,722	.....	57·5	61·1	.....	55·8	.....	1917
.....	.....	†623,626,046	.....	†64·8	†13·8	.....	†34·5	.....	1918
.....	.....	†352,335,950	.....	†38·4	.....	†4·8	.....	†20·01	1919
.....	.....	†222,130,586	.....	†20·8	†16·1	.....	†00·1	.....	1920
†50,995,181	†29,730,763	.....	†2·5	.....	†16·5	.....	.....	†5·9	1921
†7,563,652	.....	†6,122,677	.....	†1·22	.....	†39·7	.....	†37·7	1922
.....	.....	†142,716,593	.....	†17·8	†7·3	.....	†25·4	.....	1923
.....	.....	†165,395,430	.....	†18·5	†11·3	.....	†12·0	.....	1924
.....	.....	†284,429,106	.....	†35·6	.....	†10·8	†2·1	.....	1925
.....	.....	†401,371,405	.....	†43·3	†16·4	.....	†22·9	.....	1926
.....	.....	†236,680,637	.....	†22·9	†11·1	.....	.....	†4·8	1927
.....	.....	†141,499,831	.....	†12·7	†7·5	.....	.....	†1·3	1928

*9 months. †Merchandise only.

No. 8—STATEMENT (by Provinces) showing the Value of Exports, of Total Imports entered for Home Consumption, and the Amount of Duty Collected by the Dominion of Canada during the fiscal years ended March 31, 1926, 1927 and 1928

PROVINCE OF NOVA SCOTIA

No.	Ports	Fiscal Year ended March 31, 1926			Fiscal Year ended March 31, 1927			Fiscal Year ended March 31, 1928		
		Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty
		$	$	$	$	$	$	$	$	$
1	Amherst	160,801	316,059	43,893 92	67,938	388,100	52,958 47	289,685	339,920	45,612 22
2	Annapolis	62,799	56,697	4,426 97	93,400	55,304	7,776 97	141,586	84,057	14,317 01
3	Antigonish	.....	30,371	5,443 62	.....	25,414	5,147 32	.....	37,487	6,969 77
4	Arichat	88,425	3,263	476 52	94,360	6,426	471 91	144,793	7,955	915 41
5	Baddeck	614,518	3,604	701 12	601,648	4,407	998 15	816,623	9,997	1,396 88
6	Barrington Passage	94,190	8,706	640 21	111,245	6,650	697 07	133,758	11,754	1,179 12
7	Bridgewater	409,121	58,640	9,305 52	316,431	125,733	12,766 53	603,947	104,463	12,978 51
8	Canso	588,118	81,415	10,903 45	656,919	76,363	9,293 72	707,712	84,022	14,294 82
9	Digby	282,324	61,418	6,705 86	411,920	78,294	7,054 93	365,922	88,907	12,673 00
10	Glace Bay	.....	147,581	25,057 06	.....	258,188	46,331 58	.....	273,038	56,491 15
11	Halifax	37,324,283	14,437,382	2,415,281 63	36,040,816	16,303,493	2,646,713 50	35,819,784	19,908,515	2,793,297 30
12	Kentville	39,248	359,147	19,167 43	71,951	507,871	21,337 88	91,028	287,663	17,104 72
13	Liverpool	554,497	48,190	3,591 91	409,975	65,087	4,877 82	225,780	154,001	8,685 67
14	Lockeport	43,770	19,385	1,008 22	46,230	17,815	523 43	48,900	13,337	653 91
15	Lunenburg	501,558	263,224	14,684 50	619,593	309,048	16,650 17	585,630	376,874	10,661 93
16	Middleton	3,334	26,483	1,980 65	.....	44,315	1,592 03	6,213	16,556	1,330 77
17	New Glasgow	.....	493,923	55,550 12	.....	516,105	62,258 84	.....	613,498	71,899 26
18	North Sydney	2,282,705	245,738	27,798 65	2,280,509	316,843	26,447 90	2,602,656	353,574	24,348 26
19	Parrsboro	915,799	8,856	1,270 62	735,558	3,590	576 96	978,030	10,808	1,731 18
20	Pictou	320,375	39,279	4,567 75	238,384	72,297	5,906 40	418,658	58,572	8,648 57
21	Port Hawkesbury	12,997	12,160	2,055 36	37,569	7,832	1,789 78	73,678	18,062	3,207 05
22	Port Hood	.....	10,661	1,276 15	.....	24,756	2,895 04	50,602	30,235	3,064 46
23	Shelburne	154,040	24,303	4,512 50	134,695	38,952	7,027 53	174,965	30,193	6,021 97
24	Sydney	2,250,317	2,004,437	170,269 03	6,031,546	1,741,527	129,021 57	4,060,054	2,078,198	176,711 30
25	Truro	52,484	673,619	102,776 57	55,711	822,064	141,721 07	55,594	920,151	137,566 52
26	Weymouth	361,082	20,257	2,208 29	436,501	21,210	1,821 39	315,389	24,308	2,764 95
27	Windsor	1,018,142	416,294	28,264 98	1,195,146	358,177	41,675 33	1,060,427	524,981	25,462 15
28	Yarmouth	2,198,667	1,495,930	63,820 26	2,538,940	1,283,601	55,337 74	2,420,068	1,285,327	54,905 85
	Total	50,333,594	21,367,022	3,027,638 87	53,226,985	23,479,462	3,311,671 03	52,191,512	27,746,453	3,514,903 71

PROVINCE OF PRINCE EDWARD ISLAND

1	Charlottetown	1,097,724	881,249	120,051 08	1,312,033	851,585	138,191 72	1,076,336	1,181,541	147,034 88
2	Summerside	130,604	180,025	23,251 09	37,034	329,368	24,486 03	189,552	553,042	39,584 70
	Total	1,228,328	1,061,274	143,302 17	1,349,037	1,180,953	162,677 75	1,265,888	1,734,583	186,619 58

PROVINCE OF NEW BRUNSWICK

1	Bathurst	91,154	221,156	15,421 49	197,828	263,499	15,880 78	197,918	307,402	18,073 00
2	Campbellton	1,678,653	193,689	12,436 83	855,536	251,729	17,281 40	1,124,562	256,864	22,681 51
3	Chatham	702,807	208,689	13,211 93	816,691	194,123	13,828 53	912,242	179,281	9,319 40
4	Fredericton	.....	1,643,403	298,371 52	.....	1,200,118	322,629 51	.....	2,031,145	649,225 57
5	McAdam Junction	14,680,578	223,845	23,871 03	14,960,051	302,731	33,191 78	14,074,299	281,722	23,212 43
6	Moncton	286,736	1,785,987	326,173 17	180,995	1,977,316	357,324 50	361,629	2,134,767	393,441 70
7	Newcastle	1,251,371	36,625	5,126 57	593,471	56,701	5,160 14	358,096	51,909	7,159 73
8	Sackville	.....	117,348	15,397 80	.....	176,660	17,810 15	.....	130,267	13,035 33
9	St. Andrews	401,544	195,336	24,416 98	388,177	307 175	19,802 87	338,609	292,483	20,444 05
10	St. John	76,853,203	20,151,989	5,136,039 02	79,149,671	21,338,672	4,805,104 23	50,466,168	17,357,214	2,639,023 50
11	St. Stephen	200,999	1,709,951	97,503 88	290,284	1,564,108	115,058 42	258,148	1,402,723	91,662 49
12	Woodstock	2,907,214	418,556	46,391 27	3,540,481	646,875	101,411 23	3,429,874	802,207	116,966 48
	Total	99,054,259	26,906,574	6,014,361 49	100,973,185	28,279,707	5,824,483 54	71,521,545	25,227,984	4,004,245 19

PROVINCE OF QUEBEC

1	Athelstan	29,104,938	1,959,934	188,886 19	33,307,192	4,023,007	208,846 72	33,743,853	3,680,673	210,924 59
2	Beebe Junction	9,902,577	1,830,437	98,808 26	9,603,371	1,358,489	123,654 29	7,600,961	1,440,890	140,746 37
3	Chicoutimi	.....	.....	.....	2,819,893	5,518,692	744,946 80	6,391,557	5,766,473	325,733 44
4	Coaticooke	22,111,752	453,161	20,214 90	17,079,272	412,854	23,786 51	16,576,493	423,211	36,102 13
5	Gaspé	767,823	193,615	12,521 96	773,441	95,181	4,251 20	317,991	40,358	1,975 58
6	Granby	.....	1,378,036	91,231 67	.....	1,597,899	91,584 75	.....	1,655,933	128,709 25
7	Hull	.....	1,765,216	168,874 12	.....	2,979,645	392,092 69	.....	2,573,928	291,896 89
8	Lake Megantic	130,808	37,690	4,365 77	179,691	93,039	12,371 03	1,308,697	40,154	7,084 79
9	Montreal	240,010,515	192,662,298	32,920,210 38	216,947,753	212,901,307	35,536,903 97	187,612,703	227,916,633	36,999,655 78
10	Paspébiac	355,808	40,511	1,729 47	259,052	56,646	2,877 00	74,255	17,518	1,647 20
11	Percé	14,406	21,619	2,062 63	240,471	83,762	6,063 13	327,334	285,920	27,553 74
12	Port Burwell	.....	1,558	447 64	.....	2,438	502 80	.....	14,713	2,361 88
13	Quebec	17,958,019	16,318,355	2,327,846 45	17,877,730	15,509,185	2,350,996 95	14,814,784	19,940,309	2,933,360 43
14	Rimouski	832,360	129,374	17,219 42	937,259	151,796	22,631 70	908,125	124,381	15,365 60
15	Saint Armand	12,465,132	304,786	20,973 46	15,949,896	227,987	24,228 23	13,352,763	323,901	38,457 94
16	Saint Hyacinthe	251	5,102,259	444,084 89	784	5,409,350	562,745 02	493	7,399,242	675,788 31
17	Saint John's	73,492,473	7,104,167	663,390 41	62,015,787	9,168,509	770,513 07	63,631,855	8,523,005	742,778 45
18	Shawinigan Falls	.....	4,719,263	156,319 52	.....	5,436,889	296,426 02	.....	5,413,374	254,896 92
19	Sherbrooke	1,342,010	7,025,855	640,162 03	615,075	8,001,055	853,262 07	474,878	9,215,252	918,923 66
20	Sorel	150,320	847,983	52,537 83	184,944	786,845	59,148 44	175,168	680,868	47,656 07
21	Sutton	11,793,623	432,686	35,912 39	14,773,374	397,431	40,407 23	11,712,839	267,481	48,955 78
22	Three Rivers	2,801,784	7,626,756	882,560 59	3,342,425	5,542,589	495,447 53	3,835,953	6,703,168	604,433 17
23	Valleyfield	.....	3,472,571	88,742 75	.....	2,440,467	73,849 37	.....	2,614,879	73,469 86
	Total	423,234,599	253,428,130	38,839,102 16	396,907,410	282,195,062	42,700,536 51	362,860,712	305,065,264	44,528,477 83

No. 8—STATEMENT (by Provinces) showing the Value of Exports, of Total Imports entered for Home Consumption, etc.—*Continued*

PROVINCE OF ONTARIO

No.	Ports	Fiscal Year ended March 31, 1926			Fiscal Year ended March 31, 1927			Fiscal Year ended March 31, 1928		
		Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty
		$	$	$	$	$	$	$	$	$
1	Amherstburg	1,266,330	1,097,913	185,726 02	2,468,710	1,421,501	238,278 38	3,280,948	1,676,087	329,830 43
2	Belleville	179,513	2,785,208	372,154 65	297,523	2,835,658	439,239 77	381,588	2,648,980	437,837 35
3	Bowmanville	.....	1,597,393	96,156 58	.....	1,115,323	79,237 89	.....	1,353,746	120,994 48
4	Brantford	2,229	7,234 502	416,688 08	13,727	7,323,562	490,073 77	7,804	7,659,474	564,350 00
5	Bridgeburg	70,123,995	3,585,400	591,623 32	72,594,132	4,559,927	666,147 70	72,778,951	5,326,719	749,742 39
6	Brockville	226,543	3,518,241	153,388 31	263,301	1,841,103	154,085 12	621,327	2,369,706	148,458 17
7	Chatham	37,756	4,250,929	714,208 21	13,040	5,749,793	922,845 00	420,861	5,454,998	864,617 08
8	Cobourg	1,585,707	1,563,463	266,232 51	1,858,280	1,650,660	273,155 75	2,110,032	1,783,593	235,050 26
9	Collingwood	.....	537,220	32,181 88	.....	409,428	29,605 87	.....	478,519	28,162 31
10	Cornwall	8,237,023	3,983,627	177,169 07	3,351,619	2,844,410	183,467 25	4,306,590	3,060,395	196,691 15
11	Deseronto	13,010	69,345	9,647 60	5,720	47,052	5,434 69	128	50,674	6,392 54
12	Fort Frances	15,151,835	1,288,819	254,842 60	15,640,522	2,144,936	438,095 11	19,347,308	2,043,440	391,494 23
13	Fort William	102,568,694	7,146,601	714,960 51	82,047,529	6,689,815	994,364 59	86,519,016	6,432,329	1,096,867 66
14	Galt	.....	5,196,101	373,457 47	.....	5,777,430	430,719 81	1,802	5,902,974	497,174 87
15	Gananoque	38,081	441,684	51,571 60	17,793	497,385	63,870 57	41,742	528,340	73,850 67
16	Goderich	3,096	1,175,813	93,242 75	.....	1,389,410	93,263 34	.....	1,328,152	113,435 43
17	Guelph	.....	4,218,616	337,344 83	.....	4,307,293	359,563 30	.....	4,755,708	439,728 62
18	Hamilton	2,692,211	38,149,816	3,522,141 83	4,476,135	42,212,891	4,402,060 75	4,260,532	42,236,584	4,439,128 66
19	Ingersoll	.....	650,134	86,513 21	.....	668,021	71,095 49	.....	750,130	77,016 26
20	Kenora	29,462	890,917	200,661 73	21,511	529,320	69,766 59	30,335	542,785	85,900 27
21	Kingston	196,852	2,160,229	154,520 35	216,469	2,445,349	185,560 20	244,718	2,976,565	261,866 97
22	Kitchener	.....	13,699,368	774,191 02	.....	13,023,139	903,596 18	.....	13,983,286	1,177,944 70
23	Lindsay	.....	400,515	28,059 96	.....	452,330	43,122 05	.....	570,448	104,345 23
24	London	.....	9,458,160	1,231,965 04	.....	11,585,767	1,589,759 73	.....	12,316,421	1,721,454 98
25	Midland	39,532	1,152,690	70,404 92	78,858	1,618,048	104,536 00	18,906	1,300,135	119,170 39
26	Morrisburg	134,935	164,637	9,709 80	92,517	179,137	9,529 02	114,631	178,667	12,883 75
27	Napanee	.....	456,665	58,285 72	.....	414,317	52,734 22	.....	375,844	50,447 26
28	Niagara Falls	105,512,925	8,209,256	1,156,474 02	97,985,211	8,429,512	1,113,044 36	95,254,640	10,486,808	1,533,669 34
29	North Bay	460,817	2,934,726	413,012 92	428,725	3,740,642	528,699 14	517,180	4,137,663	618,700 62
30	Orillia	.....	2,741,390	84,037 32	.....	2,804,576	86,012 59	.....	4,420,480	92,709 65
31	Oshawa	2,399	19,349,983	5,421,748 20	1,448	24,877,254	6,188,437 96	1,557	32,146,638	8,063,136 57
32	Ottawa	.....	11,004,027	1,532,267 81	.....	13,396,531	1,902,310 30	.....	15,117,799	2,381,701 39

33	Owen Sound	100	909,608	80,221 03	8,701	1,229,340	82,320 41	27,777	1,102,280	90,892 75
34	Paris	.....	1,221,602	77,531 09	.....	1,044,343	62,145 49	.....	981,874	50,179 55
35	Parry Sound	122,295	775,026	207,725 01	111,685	1,106,153	273,298 11	74,180	1,647,023	299,905 51
36	Peterborough	.....	5,862,504	738,525 93	.....	7,066,561	999,902 18	833	8,165,207	1,220,696 06
37	Picton	.....	261,865	15,498 10	.....	164,440	9,254 12	.....	149,604	9,968 73
38	Port Arthur	111,679,444	2,753,828	217,519 63	105,828,148	2,760,979	406,577 26	104,106,965	2,095,466	434,135 04
39	Port Hope	181	378,231	38,116 19	1,045	429,552	38,738 35	601	453,444	49,552 48
40	Port McNicoll	23,129	57,372	4,045 53	10,126	88,136	1,064 56	65,799	89,381	5,153 07
41	Prescott	9,827,815	2,892,664	358,202 55	9,089,928	2,995,982	402,102 72	10,460,132	3,638,556	482,775 50
42	St. Catharines	567,048	5,116,191	693,108 00	970,904	5,946,940	757,573 10	504,833	5,527,165	691,640 41
43	St. Thomas	.....	2,095,014	339,050 86	106,103	2,240,510	350,413 71	70,162	2,226,660	351,811 29
44	Sarnia	36,516,556	15,840,458	884,898 37	43,753,048	16,673,576	900,885 55	39,108,625	14,283,139	858,851 49
45	Sault Ste. Marie	13,273,999	4,166,202	558,906 65	13,954,128	5,446,337	767,795 71	11,090,917	6,340,452	869,137 83
46	Simcoe	38,060	1,308,988	160,771 71	55,823	1,384,784	119,312 36	664,416	1,334,573	122,255 16
47	Stratford	.....	2,421,776	304,506 65	.....	2,830,141	343,583 75	.....	2,938,389	376,901 02
48	Sudbury	.....	1,323,014	126,290 40	.....	1,521,813	120,743 21	.....	1,817,053	155,973 80
49	Tillsonburg	230,247	702,552	166,543 74	145,886	931,430	205,840 34	361,481	1,091,809	239,351 82
50	Toronto	1,808,806	209,261,820	31,697,623 36	1,921,776	228,015,957	35,687,329 15	1,522,355	242,213,317	41,729,836 29
51	Trenton	34,963	1,198,631	65,022 48	193,767	1,209,137	101,374 63	8,430	616,388	69,692 66
52	Wallaceburg	1,540,092	2,016,282	643,351 75	2,362,493	1,977,425	434,812 42	1,721,317	4,437,614	516,410 42
53	Welland	1,938,464	12,413,712	813,544 25	1,042,219	10,918,112	697,186 68	2,974,892	11,506,511	640,022 59
54	Whitby	53,197	181,425	13,709 24	93,476	250,659	14,399 07	86,508	258,316	13,419 50
55	Windsor	51,656,725	39,699,108	9,290,750 82	52,856,367	43,878,552	9,178,247 76	56,497,150	44,433,222	9,459,687 20
56	Woodstock	11,214	1,565,232	180,348 91	17,142	1,722,866	134,607 85	13,048	2,106,400	187,291 51
	Total	537,825,280	475,536,493	67,260,402 09	514,395,535	518,815,245	75,201,220 98	519,621,017	553,847,930	85,960,295 36

PROVINCE OF MANITOBA

1	Brandon	64,034	1,044,511	117,860 00	68,079	1,306,813	151,673 39	74,584	1,684,175	189,677 34
2	Emerson	12,067,921	542,680	32,902 05	15,276,142	614,057	46,139 43	18,226,495	1,076,002	87,619 40
3	Gretna	225,425	130,567	9,191 58	89,596	120,688	8,552 53	46,829	186,426	14,090 02
4	Portage la Prairie	.....	398,931	34,035 70	.....	544,414	63,549 94	.....	923,326	95,512 37
5	Winnipeg	57,361	40,760,958	7,600,036 76	62,684	46,746,111	8,827,077 68	50,605	48,950,520	9,050,669 17
	Total	12,414,741	42,877,647	7,794,026 09	15,496,501	49,332,083	9,096,992 97	18,398,513	52,820,449	9,437,568 30

PROVINCE OF SASKATCHEWAN

1	Moose Jaw	239,858	1,612,034	266,933 24	85,494	2,267,372	347,043 77	78,662	4,122,080	448,465 08
2	North Portal	9,936,129	499,256	33,091 37	9,719,185	713,611	42,440 10	10,424,317	1,033,375	62,187 80
3	Prince Albert	.....	230,046	36,650 39	.....	421,522	50,980 98	.....	700,136	63,477 93
4	Regina	66,010	9,116,396	1,744,870 62	44,595	12,060,133	1,973,355 99	69,368	13,957,839	2,305,427 31
5	Saskatoon	.....	3,439,138	471,675 46	.....	5,237,701	674,981 44	.....	6,831,933	751,937 48
	Total	10,241,997	14,896,870	2,553,221 08	9,849,274	20,700,339	3,088,802 28	10,572,347	26,645,363	3,631,495 60

No. 8—STATEMENT (by Provinces) showing the Value of Exports, of Total Imports entered for Home Consumption, etc.—*Concluded*

PROVINCE OF ALBERTA

No.	Ports	Fiscal Year ended March 31, 1926			Fiscal Year ended March 31, 1927			Fiscal Year ended March 31, 1928		
		Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty	Exports	Imports entered for Home Consumption	Duty
		$	$	$	$	$	$	$	$	$
1	Calgary	.....	8,305,337	1,594,817 10	.....	9,741,058	1,916,660 65	.....	12,167,854	2,242,352 25
2	Edmonton	.....	5,174,483	1,144,469 43	.....	6,612,963	1,357,682 30	.....	8,725,528	1,647,715 32
3	Lethbridge	669,954	3,448,104	210,406 00	1,153,353	4,900,621	220,874 53	948,037	4,389,117	264,039 35
4	Medicine Hat	.....	286,836	38,055 91	.....	339,262	41,282 59	.....	617,649	49,910 05
	Total	669,954	17,214,760	2,987,748 44	1,153,353	21,593,904	3,536,500 07	948,037	25,900,148	4,204,016 97

PROVINCE OF BRITISH COLUMBIA

1	Abbotsford	5,512,907	318,192	38,009 53	5,992,213	326,120	42,915 05	4,230,178	476,986	61,730 59
2	Cranbrook	1,570,486	400,856	70,855 63	2,350,573	552,710	78,868 34	1,743,127	520,251	68,187 74
3	Fernie	1,370,578	406,668	148,951 33	1,432,331	434,965	146,566 21	1,515,735	438,885	140,373 22
4	Grand Forks	95,065	117,439	37,617 15	81,364	298,838	129,540 23	64,520	245,591	95,907 48
5	Nanaimo	5,890,600	531,114	86,444 11	5,674,031	394,517	60,542 18	6,982,012	423,189	54,167 22
6	Nelson	378,031	315,288	55,472 37	577,951	400,845	79,640 80	455,685	529,050	96,483 20
7	New Westminster	14,155,275	1,784,412	267,706 72	14,512,819	2,467,611	403,216 52	12,760,754	2,151,132	364,231 54
8	Penticton	109,267	284,228	36,780 59	50,611	272,635	43,010 38	139,425	259,757	44,262 16
9	Prince Rupert	15,418,146	1,367,819	316,503 65	20,617,981	1,478,461	292,397 87	27,050,065	1,077,674	191,451 34
10	Revelstoke	.....	323,065	62,675 61	.....	225,859	39,417 41	.....	232,385	45,721 22
11	Rossland	23,040	526,156	55,894 29	10,698	680,086	78,036 96	4,848	895,698	84,563 77
12	Vancouver	144,634,857	59,843,051	12,213,001 38	116,920,027	69,390,839	12,606,352 74	153,021,338	74,002,310	13,050,236 20
13	Victoria	3,299,485	7,202,060	1,802,089 10	3,854,562	8,013,065	1,943,459 79	3,601,400	8,316,144	2,016,827 50
	Total	192,457,737	73,510,348	15,192,001 46	172,075,161	84,936,551	15,943,964 48	211,569,087	89,569,052	16,314,143 18

YUKON

1	Dawson	8,575	265,388	54,131 58	461,338	143,303	45,412 46	223,924	170,396	39,653 88
2	White Horse	1,068,073	185,119	48,643 90	1,685,333	199,871	45,501 71	1,283,715	192,186	42,900 94
	Total	1,076,648	450,507	102,775 48	2,146,671	343,174	90,914 17	1,507,639	362,582	82,554 82

RECAPITULATION BY PROVINCES

1	Nova Scotia	50,333,594	21,367,022	3,027,638 87	53,226,985	23,479,452	3,311,671 03	52,191,512	27,746,453	3,514,903 71
2	Prince Edward Island	1,228,328	1,061,274	143,302 17	1,349,067	1,180,953	162,677 75	1,265,888	1,734,583	186,619 58
3	New Brunswick	99,054,259	26,906,574	6,014,361 49	100,973,185	28,279,707	5,824,483 54	71,521,545	25,227,984	4,004,245 19
4	Quebec	423,234,599	253,428,130	38,839,102 16	396,907,410	282,195,062	42,700,536 51	362,860,712	305,065,264	44,528,477 83
5	Ontario	537,825,280	475,536,493	67,260,402 09	514,395,535	518,815,245	75,201,220 98	519,621,017	553,847,930	85,960,295 36
6	Manitoba	12,414,741	42,877,647	7,794,026 09	15,496,501	49,332,083	9,096,992 97	18,398,513	52,820,449	9,437,568 30
7	Saskatchewan	10,241,997	14,896,870	2,553,221 08	9,849,274	20,700,339	3,088,802 28	10,572,347	26,645,363	3,631,495 60
8	Alberta	669,954	17,214,760	2,987,748 44	1,153,353	21,593,904	3,536,500 07	948,037	25,900,148	4,204,016 97
9	British Columbia	192,457,737	73,510,348	15,192,001 46	172,075,161	84,936,551	15,943,964 48	211,569,087	89,569,052	16,314,143 18
10	Yukon	1,076,648	450,507	102,775 48	2,146,671	343,174	90,914 17	1,507,639	362,582	82,554 82
	Total	1,328,537,137	927,249,625	143,914,579 33	1,267,573,142	1,030,856,480	158,957,763 78	1,250,456,297	1,108,919,808	171,864,320 54
	Prepaid postal parcels duty received through P.O. Department	.....	79,107	18,530 74	.....	36,025	8,603,25	.....	36,658	8,447 46
	Grand Total	**1,328,537,137**	**927,328,732**	**143,933,110 07**	**1,267,573,142**	**1,030,892,505**	**158,966,367 03**	**1,250,456,297**	**1,108,956,466**	**171,872,768 00**

No. 9—Statement of Customs-Excise Revenue and other Services by Ports, Outports and Stations

NOVA SCOTIA

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Amherst	35,601 95	63,021 55	27 00	25 15	98,675 65	1,493		426	2	1,397	21			2	2
Joggin Mines	389 34	370 97			760 31	66	1	25		27	1		1	23	22
Northport	28 85	5 04			33 89	25									
Oxford	1,033 68	5,642 27			6,675 95	158		180		123	5				
Pugwash	162 89	256 45			419 34	74	11	54		40		4	11	24	17
River Hebert	8 69	27 14			35 83	3		4		1	1				
Springhill	4,801 50	7,994 50			12,796 00	150		100		217					
Wallace	3,510 15	600 79			4,110 94	81	1	10		73	1	1	1	19	18
Malagash							2					2	2	31	31
Tidnish	75 17	15 12			90 29	12									
Total	45,612 22	77,933 83	27 00	25 15	123,598 20	2,062	15	799	2	1,878	29	7	15	99	90
Annapolis Royal	1,711 96	1,799 34			3,511 30	202	24	99		209	9	21	22	112	112
Bridgetown	9,504 89	9,376 91			18,881 80	249		99		238	8			39	39
Clementsport	3,080 06	576 49			3,656 55	80	6			49	2	6	6	24	24
Port Wade	20 10	3 70			23 80	6	6	24		4		5	6	21	18
Hampton														85	84
Total	14,317 01	11,756 44			26,073 45	537	36	222		500	19	32	34	281	277
Antigonish	6,840 07	3,057 37		238 00	10,135 44	215		180		360	10	2	2	13	13
Bayfield	49 17	10 52			59 69	29				39				9	9
Cape George														57	57
Harbour au Bouche	80 53	14 33			94 86	28				42	1			21	21
Malignant Cove														13	13
Total	6,969 77	3,082 22		238 00	10,289 99	272		180		441	11	2	2	113	113
Arichat	182 52	177 25			359 77	58		18		22		1	1	378	381
St. Peters	603 64	201 55			805 19	67	13	15		77	1	5	13	293	281
Descousse	82 95	12 65			95 60	13						2	2	81	81
Fourchu	16 86	2 65			19 51	6								36	36
Irish Cove														11	11
L'Ardoise	4 65	86			5 51	3						1	2	5	5
Petit de Grat	12 08	2 01			14 09	4						19	22	171	166
River Bourgeoise	10 81	1 79			12 60	5						6	7	26	25
West Arichat	1 90	31			2 21	2								553	555
Total	915 41	399 07			1,314 48	158	13	33		99	1	34	47	1,554	1,541

Baddeck	771 10	713 17			1,484 27	53	9	109		105	4		9	450	443
Iona	508 28	177 03			685 31	23				77	81			266	266
New Campbellton	2 10	40			2 50	1								86	86
Aspy Bay	36 12	6 05			42 17	9								25	25
Ingonish	33 37	5 82			39 19	7	5					15	13	93	106
Little Narrows							1							49	49
Neil's Harbour	4 51	1 94			6 45	2								72	72
Munroes Point							20					17	20	25	22
St. Ann's	41 40	6 61			48 01	9							3	80	76
White Point												14	14	12	12
Total	1,396 88	911 02			2,307 90	104	35	109		182	85	46	59	1,158	1,157
Barrington Passage	430 26	508 78		15 00	954 04	112		87		87	1	2	1	370	378
Clark's Harbour	664 71	389 31			1,054 02	101	32	61				38	34	556	565
Port La Tour	9 76	1 64			11 40	30								105	105
Shag Harbour												1	1	9	10
Woods Harbour	74 39	12 23			86 62	30	3					7	7	392	393
Total	1,179 12	911 96		15 00	2,106 08	273	35	148		87	1	48	43	1,432	1,451
Bridgewater	12,978 51	6,739 40			19,717 91	520	54	223		536	9	28	49	181	160
Canso	10,803 92	3,067 98		420 56	14,292 46	238		98		52		165	156	696	709
Guysboro	271 57	322 14		13 00	606 71	68	17	26		20		3	15	398	386
Isaac's Harbour	91 97	71 05			163 02	30	11	12		18		26	36	155	143
Port Mulgrave	2,619 89	671 70			3,291 59	101	2	37		221	24	2	3	1,190	1,188
Sherbrooke	276 69	516 65			793 34	39	27	19		3		16	27	89	79
Ecum Secum														93	93
Larry's River														89	89
Liscomb	13 64	2 12			15 76	9	1					11	11	100	101
Middle Country Harbour							11					6	11	43	38
Port Bickerton														129	128
Port . elix												1	1	187	187
Queensport	217 14	37 68			254 82	48				8		13	13	339	339
Sonora													1	109	108
Whitehaven												18	18	181	183
Total	14,294 82	4,689 32		433 56	19,417 70	533	69	192		322	24	261	292	3,798	3,771
Digby	7,814 73	3,373 52	2 00		11,190 25	275	16	125	1	281	21	11	16	625	622
Bear River	2,335 30	814 55		25 00	3,174 85	180	10	12		158	4	9	10	94	91
Freeport	1,775 96	1,127 16			2,903 12	48	24	32		35		24	20	369	369
Sandy Cove	86 55	24 68			111 23	21				6				92	92
Westport	424 26	53 14			477 40	83	21			46		32	19	353	367
Little River	2 10	0 30			2 40	2								106	105
Tiverton	234 10	57 96			292 06	43	14			22		12	16	268	268
Total	12,673 00	5,451 31	2 00	25 00	18,151 31	652	85	169	1	548	25	88	81	1,907	1,914
Glace Bay	56,491 15	24,646 30			81,137 45	1,227		255		1,325	13			32	30

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

NOVA SCOTIA—Continued

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Halifax	2,792,118 87	552,534 91	35,740 16	15,407 59	3,395,801 53	26,575	37,613	2,069	441	8,982	12,918	1,423	1,542	1,410	1,278
Sheet Harbour	965 44	81 96			1,047 40	65	20	1		11		9	20	314	305
East Chezzetcook														13	
East Jeddore							1					3	1	173	173
Hubbards	114 34	98 80			213 14	44		24		38				12	12
Ingramport	98 65	568 58			667 23	19	5	13		8		1	5	30	28
Moser's River							1						1	64	62
Necum Teuch														53	53
Port Dufferin												3		116	110
Sambro							12					6	12	101	87
Ship Harbour							3					1	3	150	155
Spry Bay														156	152
Three Fathom Harbour														4	2
West Chezzetcook														11	28
Total	2,793,297 30	553,284 25	35,740 16	15,407 59	3,397,729 30	26,701	37,655	2,107	441	9,039	12,918	1,446	1,584	2 607	2,445
Kentville	7,677 98	16,461 35			24,139 33	657		240		515	15				
Aylesford Station	371 61	285 42		37 60	694 63	106		60		70	5				
Berwick	2,166 85	1,552 28			3,719 13	212		119		170	1				
Canning	161 55	538 93			700 48	97		57		68		1		23	24
Kingsport	15 26	30 66			45 92	13		12		3		2		6	10
Port Williams	4,175 94	995 71			5,171 65	181	4	28		143	2	1	4	46	43
Wolfville	2,535 53	8,167 50			10,703 03	260		142		257	2	6	0	28	34
Hall's Harbour														41	42
Harbourville							1					1	1	49	48
Morden														31	31
Total	17,104 72	28,031 85		37 60	45,174 17	1,526	5	659		1,226	25	11	5	224	232
Liverpool	8,137 48	7,727 93		4,306 55	20,171 96	293	12	237		368	11	86	94	73	66
Caledonia	172 31	679 40			851 71	55		36							
Port Medway	375 88	65 53			441 41	43	4					5	9	9	7
Port Mouton												1	2	8	7
Total	8,685 67	8,472 86		4,306 55	21,465 08	391	16	273		368	11	92	105	90	80
Lockeport	663 91	330 06			993 97	145	8	21		88		20	23	32	30
Lunenberg	5,718 82	5,637 85		2,360 00	13,716 67	1,332	55	136		353	20	262	300	229	231
Chester	2,456 87	870 82			3,327 69	190	1	57		168	3	26	25	113	115
La Have	548 96	3,398 90		60 00	4,007 86	165	3	75				68	39	253	272

Mahone Bay	1,567 40	1,596 45			3,163 85	135	3	110		83	6	6	5	50	48
Riverport	369 88	45 23		60 00	475 11	149						38	30	190	229
Conquerall Banks														61	61
Petite Rivière														26	25
Voglers Cove													1	35	36
West Du olin												2		51	52
Total	10,661 93	11,549 25		2,480 00	24,691 18	1,971	62	378		604	29	402	400	1,008	1,069
Middleton	1,279 72	3,667 70			4,947 42	228		144		213	3				
Margaretsville	5 17	43 85			49 02	5	3	10				2	3	61	62
Port George	0 12	0 02			0 14	1	1					1		52	53
Springfield	45 76	7 21			52 97	31	7			11	2				
Total	1,330 77	3,718 78			5,049 55	265	11	154		224	5	3	3	113	115
New Gla gow	71,696 71	170,302 06		825 50	242,824 27	1,662		626		1,937	22			38	36
Merigomish	202 55	35 61			238 16	60				52	5				
Total	71,899 26	170,337 67		825 50	243,062 43	1,722		626		1,989	27			38	36
North Sydney	11,947 61	10,031 13		283 87	22,262 61	1,950	14,759	284		4,990	1,693	868	892	883	876
Grand Narrows	68 22	4 31			72 53	19				28	14			73	75
Sydney Mines	12,293 34	4,323 67			16,617 01	486		117		529	8				
East Bay														7	7
Little Bras d'Or	39 09	6 17			45 26									174	174
Total	24,348 26	14,365 28		283 87	38,997 41	2,455	14,759	401		5,547	1,715	868	892	1,137	1,132
Parrsboro	1,609 48	1,530 55		756 43	3,896 46	138	39	186		88	7	35	35	478	480
Advocate Harbour														2	2
Apple River	37 8	6 6			44 53	12	36					10	28	4	30
Five Islands	43 70	6 8			50 5	10								11	11
Port Greville	27 61	4 45			32 06	10	29					22	26	45	47
Spencers Island	12 52	1 96			14 48	3	4					1	4	65	60
Total	1,731 18	1,550 48		756 43	4,038 09	173	108	186		88	7	68	93	647	630
Pictou	7,779 26	11,025 07		400 00	19,204 33	291	13	237		295	65	10	14	606	605
River John	297 62	149 24		50 00	496 86	54		6		70	10			22	21
Tatamagouche	571 69	424 74			996 43	85		58		20				2	2
Brule														2	3
Total	8,648 57	11,599 05		450 00	20,697 62	430	13	301		385	75	10	14	632	631
Port Hawkesbury	2,386 12	753 17			3,139 29	113		45		81	4	59	46	98	115
Port Hastings	574 47	93 25			667 72	28				19		1	1	101	101
Marble Mountain	3 50	54			4 04	1								72	72
Orangedale	110 99	19 78			130 77	30				48	1			1	1
Port Malcolm							4					2	6	17	12
West Bay	12 35	2 21			14 56	12				24	8			34	34
Whycocomagh	119 62	18 08			137 70	16	2					1	2	114	113
Total	3,207 05	887 03			4,094 08	200	6	45		172	13	63	55	437	448

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

NOVA SCOTIA—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Port Hood	126 30	195 25	.....	257 00	578 55	37	.....	146	.....	13	.....	.....	.....	173	173
Cheticamp	463 60	214 15	.....	.....	677 75	60	15	28	.....	.....	.....	15	15	144	147
Inverness	1,976 84	517 85	.....	.....	2,494 69	88	.....	28	.....	124	16	.....	.....	1	1
Mabou	245 86	126 90	.....	.....	372 76	26	1	7	.....	34	3	.....	1	38	37
Margaree	173 43	39 26	.....	.....	212 69	48	.....	10	.....	.....	.....	.....	.....	140	140
Grand Étang	78 43	12 96	.....	.....	91 39	22	.....	.....	.....	1	.....	.....	.....	121	121
Total	3,064 46	1,106 37	.....	257 00	4,427 83	281	16	219	.....	172	19	15	16	617	619
Shelburne	5,868 75	2,375 45	.....	6,540 32	14,784 52	234	12	110	.....	179	7	77	87	98	102
North East Harbour	42 81	8 14	.....	.....	50 95	24	.....	.....	.....	.....	.....	.....	1	91	91
Port Clyde	84 30	200 93	.....	.....	285 23	44	2	38	.....	25	2	.....	2	97	96
Sandy Point	22 16	3 21	.....	.....	25 37	26	5	.....	.....	.....	.....	99	101	86	85
East Jordan	3 95	79	.....	.....	4 74	4	.....	.....	.....	.....	.....	.....	.....	4	4
Total	6,021 97	2,588 52	.....	6,540 32	15,150 81	332	19	148	.....	204	9	176	191	376	378
Sydney	173,147 88	259,570 30	2 00	1,139 00	433,859 18	3,018	513	516	1	2,921	414	255	330	1,127	1,066
Louisburg	681 86	140 97	.....	.....	822 83	73	423	22	.....	75	124	145	138	123	136
New Waterford	2,765 80	1,101 66	.....	.....	3,867 46	236	8	51	.....	236	7	.....	.....	.....	.....
Port Morien	112 45	21 08	.....	.....	133 53	21	.....	.....	.....	22	.....	.....	.....	13	13
Gabarouse Bay	1 01	20	.....	.....	1 21	2	.....	.....	.....	.....	.....	7	6	114	112
Main-à-Dieu	2 30	51	.....	.....	2 81	1	.....	.....	.....	.....	.....	16	15	25	26
Total	176,711 30	260,834 72	2 00	1,139 00	438,687 02	3,351	944	589	1	3,254	545	423	489	1,402	1,353
Truro	136,569 25	102,073 25	.....	5,368 00	244,010 50	2,792	.....	415	2	2,430	115	.....	.....	.....	.....
Great Village	923 94	71 19	.....	.....	995 13	70	.....	.....	.....	67	.....	.....	.....	22	22
Little Bass River	73 33	1,996 71	.....	.....	2,070 04	15	6	65	.....	.....	.....	.....	6	33	28
Total	137,566 52	104,141 15	.....	5,368 00	247,075 67	2,877	6	480	2	2,497	115	.....	6	55	50
Weymouth	1,167 25	1,783 33	.....	1,282 50	4,233 08	193	34	103	.....	150	8	12	25	162	147
Belliveau's Cove	61 26	188 55	.....	631 75	881 56	25	18	62	.....	.....	.....	10	18	98	92
Church Point	318 67	195 61	.....	.....	514 28	51	3	11	.....	.....	.....	1	3	12	10
Meteghan River	1,146 70	1,275 65	.....	.....	2,422 35	107	1	52	.....	.....	.....	3	.....	44	45
Salmon River	39 86	5 09	.....	.....	44 95	21	2	.....	.....	.....	.....	4	2	31	33
Meteghan	31 21	121 04	.....	.....	152 25	14	.....	7	.....	.....	.....	10	3	85	93
Total	2,764 95	3,569 27	.....	1,914 25	8,248 47	411	58	235	.....	150	8	40	51	432	420

Windsor	24,160 52	24,743 32		35 00	48,938 84	595	135	471		650	20	129	129	121	123
Hantsport	957 10	2,543 17			3,500 27	84	2	72		71	1	2	1	28	28
Maitland	30 47	144 59			175 06	33	9	25		20		4	9	29	24
Cheverie	100 54	27 63			128 17	14	15					11	15	40	33
Noel	12 10	2 22			14 32	7	4					4	4	24	25
Walton	201 52	80 37			281 89	19	45	12				37	45	55	49
Total	25,462 25	27,541 30		35 00	53,038 55	752	210	580		741	21	187	203	297	282
Yarmouth	54,592 94	27,972 06	1,527 06	2,123 70	86,215 76	3,218	5,229	468	123	932	2,567	298	268	498	551
Lower East Pubnico	129 04	39 98			169 02	40				17		29	27	62	65
Tusket	148 01	22 66			170 67	98				66	1				
Abbotts Harbour														100	84
Wedgeport	35 86	5 84			41 70									11	13
Total	54,905 85	28,040 54	1,527 06	2,123 70	86,597 15	3,356	5,229	468	123	1,015	2,568	327	295	671	713
Nova Scotia Totals	**3,514,903 81**	**1,368,469 39**	**37,298 22**	**42,661 52**	**4,963,332 85**	**53,677**	**59,467**	**10,200**	**570**	**33,681**	**18,327**	**4,697**	**5,047**	**21,370**	**21,167**

PRINCE EDWARD ISLAND

Charlottetown	138,854 14	51,916 93	38,558 96	262 31	229,592 34	2,527	549	841	468	2,127	35	33	57	672	646
Cardigan	324 54	100 91			425 45	71		25		54				19	20
Georgetown	466 36	481 48			947 84	95	15	55		37		11	15	128	125
Montague	5,649 92	3,444 12			9,094 04	210	10	76		201	4	7	9	68	65
Murray Harbour	155 18	62 07			217 25	38		23		16		6	6	106	102
Souris	826 14	700 07			1,526 21	156	12	93		109	1	13	10	144	149
St. Peters	290 66	238 25			528 91	65		22		61	4				
Victoria	130 19	172 41			302 60	40		42						83	84
Grand River	1 25	0 20			1 45	1								42	42
Halliday's Wharf														3	3
Murray River	129 22	119 22			248 44	35		29		20				54	54
New London	40 90	45 06			85 96	13		12				2	2	4	3
Orwell														61	61
Pinette Bridge														55	57
Vernon River Bridge	166 38	25 90			192 28	23								7	7
Total	147,034 88	57,306 62	38,558 96	262 31	243,162 77	3,274	586	1,213	468	2,625	44	72	99	1,446	1,418
Summerside	36,865 62	15,551 74		660 15	53,077 51	783	7	286		951	10	10	6	67	73
Alberton	944 08	924 37			1,868 45	111		70		82	1			15	14
Port Borden	1,087 15	350 66			1,437 81	153		29		202	23				
Tignish	653 82	649 22			1,303 04	105		133		65	3			8	7
Malpeque	34 03	41 19			75 22	10		9							
Miminegash														31	30
Total	39,584 70	17,517 18		660 15	57,762 03	1,162	7	527		1,300	37	10	6	121	124
Prince Edward Island, Totals	**186,619 58**	**74,823 80**	**38,558 96**	**922 46**	**300,924 80**	**4,436**	**593**	**1,745**	**468**	**3,925**	**81**	**82**	**105**	**1,567**	**1,542**

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

NEW BRUNSWICK

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Bathurst	14,938 27	12,611 03	.....	.....	27,549 30	554	5	270	.....	801	15	6	6	22	22
Caraquet	591 83	423 92	.....	.....	1,015 75	145	.....	56	.....	119	3	112	113	75	77
Shippegan	1,231 39	928 20	.....	2 50	2,162 09	137	1	92	.....	109	.....	25	28	252	253
Lameque	83 42	56 91	.....	.....	140 33	12	.....	12	.....	.....	.....	53	49	281	282
Little Shippegan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	11	8	10
Stone Haven	10 26	45 17	.....	.....	55 43	12	.....	32	.....	.....	.....	.....	.....	2	2
Tracadie	1,217 83	299 34	.....	.....	1,517 17	75	.....	12	.....	104	.....	.....	.....	9	9
Total	18,073 00	14,364 57	.....	2 50	32,440 07	935	6	474	.....	1,133	18	211	207	649	655
Campbellton	22,242 05	19,039 53	.....	.....	41,281 58	329	24	349	.....	368	10	8	24	87	72
Dalhousie	439 46	1,626 60	.....	.....	2,066 06	113	1	164	.....	113	2	1	1	9	10
Jacquet River	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Total	22,681 51	20,666 13	.....	.....	43,347 64	442	25	513	.....	481	12	9	25	97	83
Chatham	6,973 97	17,736 22	.....	800 00	25,510 19	423	20	336	.....	459	3	9	18	145	136
Buctouche	1,502 57	1,462 52	.....	.....	2,965 09	184	2	181	.....	162	1	.....	2	14	11
Richibucto	842 86	1,047 92	.....	.....	1,890 78	120	9	180	.....	88	.....	4	9	49	43
Total	9,319 40	20,246 66	.....	800 00	30,366 06	727	31	697	.....	709	4	13	29	208	190
Fredericton	649,225 57	122,165 53	196,781 45	459 60	968,632 15	3,454	.....	669	194	3,133	72	.....	.....	7	7
McAdam Junction	22,823 02	1,476 80	.....	14,328 67	38,628 49	536	40,495	64	.....	13,738	25,068	.....	.....	.....	.....
St. Croix	389 41	63 64	.....	.....	453 05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	23,212 43	1,540 44	.....	14,328 67	39,081 54	536	40,495	64	.....	13,738	25,068	.....	.....	.....	.....
Moncton	382,989 52	158,948 36	415 56	1,697 10	544,050 54	5,030	382	623	4	5,228	91	4	.....	29	31
Albert	155 53	215 15	.....	.....	371 71	66	12	54	.....	44	3	8	11	33	31
Dorchester	1,091 21	574 75	.....	.....	1,665 96	76	.....	36	.....	48	2	.....	.....	6	6
Hillsboro	7,154 20	13,633 22	.....	.....	20,787 42	173	16	110	.....	153	3	16	16	3	2
Shediac	2,040 28	2,254 23	.....	.....	4,294 51	204	.....	115	.....	192	2	.....	.....	15	17
Alma	9 93	10 79	.....	.....	20 72	5	6	4	.....	.....	.....	3	6	81	77
Total	393,441 70	175,636 50	415 56	1,697 10	571,190 86	5,554	416	942	4	5,665	101	31	33	167	164
New Castle	7,159 73	5,334 76	.....	46 05	12,540 54	278	10	179	.....	334	14	4	7	45	42

Sackville	11,372 51	35,061 57		154 29	46,588 37	448		227		556	10			2	2
Port Elgin	1,662 82	1,706 68			3,369 50	134		63		117	3	3	3	25	26
Total	13,035 33	36,768 25		154 29	49,957 87	582		290		673	13	3	3	27	28
St. Andrews	17,077 84	2,373 74		707 75	20,159 33	525	173	144		674	368	859	863	356	353
Campobello	1,339 59	256 10			1,595 69	163	100	1				841	549	198	206
Lords Cove	897 65	335 35			1,233 00	79	356	43				914	848	116	133
North Head	553 19	546 68		50 00	1,149 87	107	233	45				310	333	128	148
Grand Harbour	99 48	29 22			128 70	23	45	10				64	53	117	118
Seal Cove	32 78	20 43			53 21	2	51	9				49	52	26	24
Wilson's Beach	443 52	64 32			507 84	39	176	8				527	390	143	155
Total	20,444 05	3,625 84		757 75	24,827 64	938	1,134	260		674	368	3,564	3,088	1,084	1,137
St. John	2,621,120 69	567,479 36	44,056 85	17,649 61	3,250,306 51	20,118	21,872	2,632	682	17,673	29,085	541	495	1,340	1,532
St. George	1,074 59	3,496 69			4,571 28	127	25	120		113	1	44	43	43	43
Sussex	11,786 55	10,721 97			22,508 52	331		203		386	6				
Beaver Harbour	4,644 72	4,448 02			9,092 74	120	137	25				221	118	310	316
Chance Harbour		6 24			6 24		25	10				27	38	116	117
Lepreaux						3	69					76	77	21	21
L'Étête	50 58	7 90			58 48	6						1			
St. Martins	346 37	125 28			471 65	29	69	36		26	1	102	104	38	34
Total	2,639,023 50	586,285 46	44,056 85	17,649 61	3,287,015 42	20,734	22,197	3,026	682	18,198	29,093	1,012	875	1,868	2,063
St. Stephen	52,587 46	58,135 46	1,117 98	1,330 45	113,171 35	1,410	76	232	14	482	199	19	10	169	177
Milltown	38,925 35	1,383 16			40,308 51	315	946	7		260	40				
Upper Mills	149 68	101 10			250 78	15	12	2							
Total	91,662 49	59,619 72	1,117 98	1,330 45	153,730 64	1,740	1,034	241	14	742	239	19	10	169	177
Woodstock	24,844 73	15,928 13	7,055 06	4,686 73	52,514 65	890		454	53						
Aroostock Junction	5,702 16	2,808 70	681 12	967 90	10,159 88	170	1,618	121	8	3,199	7,704				
Centreville	1,845 78	948 48		120 40	2,914 66	153	179	48		18	2				
Clair	1,332 50	772 66		707 24	2,812 40	141	264	24		61	12				
Debec	859 83	115 87		32 23	1,007 93	153	693	50		650	1,943				
Edmunston	58,832 76	11,756 43		64 60	70,653 79	377	98	127		622	22				
Grand Falls	12,690 73	5,508 45		857 22	19,056 40	347	389	154		254	126				
Green River	103 42	569 37			672 79	20	7	18		5	3	89	89		
St. Leonards	4,447 42	1,395 37		625 00	6,467 79	271	2,441	41							
Andover	1,673 07	417 74		184 64	2,275 45	153	148			102	235				
Bath	29 87	10 66			40 53										
Bloomfield	197 86	9 66			207 52	20	58	3							
Connors	92 94	31 79		15 00	139 73	15	49	10							
Four Falls	1,265 90	171 80		94 99	1,532 69	46	106								
Richmond Road	2,717 00	777 92			3,494 92	230	121								
River De Chute	133 20	8 65			141 85	20	226								
St. Francois de Madawaska							13								
St. Hilaire	197 31	25 69			223 00	15	29								
Total	116,966 48	41,257 37	7,736 18	8,355 95	174,315 98	3,021	6,439	1,050	61	4,911	10,047	89	89		
New Brunswick Totals	**4,004,245 19**	**1,087,511 23**	**259,198 02**	**45,581 97**	**5,387,446 41**	**38,941**	**71,787**	**8,495**	**955**	**59,391**	**65,049**	**4,955**	**4,366**	**4,321**	**4,546**

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

QUEBEC

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Athelstan	73,812 81	7,706 74		4,308 90	85,828 45	3,228	27,247	181		12,242	55,810				
Dundee	2,995 23	852 95		35 00	3,883 18	140	339	3							
Hemmingford	5,513 13	2,067 09		839 00	8,419 22	144	198	33		22					
St. Agnes de Dundee	88,523 79	61 15		391 19	88,976 13	425	4,315	5		4,384	8,235				
Trout River	37,632 58	18,661 58		436 25	56,730 41	189	200								
Franklin Centre	690 30	238 89		536 84	1,466 03	63	795	11							
Frontier	424 73	153 17		12 00	589 90	34	97	9							
Covey Hill	73 74	9 49			83 23	8	31								
Herdman	879 69	146 20			1,025 89	81	257								
Huntingdon	378 59	67 33			445 92	25									
Total	210,924 59	29,964 59		6,559 18	247,448 36	4,337	33,479	242		16,648	64,045				
Beebe Junction	18,025 47	19,705 60		2,993 75	40,724 82	1,141	12,529	322		2,661	8,000				
Georgeville	336 55	62 19		110 40	509 14	26	14							87	87
Magog	60,125 19	24,342 49			84,467 68	387		106		945	6			60	60
Rock Island	62,259 10	42,468 80		6,273 36	111,001 26	1,171	290	237		2,789	784				
Total	140,746 31	86,579 08		9,377 51	236,702 90	2,725	12,833	665		6,395	8,790			147	147
Chicoutimi	62,834 00	26,885 73	1,406 49	292 00	91,418 22	974		436	56	1,030	35	1		132	136
Hébertville	26,845 84	11,906 88			38,752 72	483		328		488	12				
Jonquière	153,189 22	30,200 45	2,563 44	120 00	186,073 11	1,690		184	29	3,102	17				
Port Alfred	82,864 48	30,433 68			113,298 16	586	148	127		525	7	35	33	131	134
Total	325,733 54	99,426 74	3,969 93	412 00	429,542 21	3,733	148	1,075	85	5,145	71	36	33	263	270
Coaticook	35,376 10	10,480 67		3,031 80	48,888 57	889	21,926	280		35,917	30,973				
Stanhope	726 03	316 97		100 00	1,143 00	88	77								
Total	36,102 13	10,797 64		3,131 80	50,031 57	977	22,003	280		35,917	30,973				
Gaspé	1,975 58	2,568 13			4,543 71	124	19	80		125	8	33	20	151	145
Granby	128,709 25	93,334 46	1,337,188 80	2,753 16	1,561,985 67	2,731		913	1,363	1,862	33				
Hull	171,698 44	1,069,555 77	53 00	2 40	1,241,309 61	1,951		1,570	5	2,225	3				
Lachute	117,962 16	31,314 99			149,277 15	2,041		508		1,774	21				
Ville Marie	2,236 29	3,158 65			5,394 94	150		195		73	2				
Total	291,896 89	1,104,029 41	53 00	2 40	1,395,981 70	4,142		2,273	5	4,072	26				
Lake Megantic	7,084 79	6,189 22		2,034 36	15,308 27	236	2,207	203		8,665	18,012	2,156	2,039	41,450	36,131

Montreal	36,795,750 78	25,956,019 41	35,447,609 50	116,007 80	98,315,387 49	325,324	55,219	32,696	20,843	131,166	41,853	1,204	1,173	6,494	6,778
Berthierville	70,494,58	570,131 22	19,029 77	5,520 00	665,175 57	531		157	419	498	7				
Joliette	49,265 78	41,458 84	13,803 97	150 00	104,678 59	1,065		590	550	1,616	22				
St-Jerôme	84,144 64	10,583 11			94,727 75	1,559		177		1,393	8				
St. Roch l'Achigan		127 28	299 00		426 28			33	49						
St. Lin		1,229 67	26 25		1,255 92			50	3						
St. Jacques		1,006 90	1,674 50		2,681 40			79	130						
L'Epiphanie		5,936 80	34,869 48		40,806 28			94	608						
Total	36,999,655 78	26,586,493 23	35,517,312 47	121,677 80	99,225,139 28	328,479	55,219	33,876	22,602	134,673	41,890	1,204	1,173	6,494	6,778
Paspebiac	1,647 20	6,389 16			8,036 36	172	8	240		170	3			70	66
Port Daniel														4	4
St. Omer														56	56
Total	1,647 20	6,389 16			8,036 36	172	8	240		170	3			130	126
Percé	889 11	426 61			1,315 72	52	3	36		27	3	2	3	5	3
Chandler	26,664 63	1,691 47			28,356 10	161	10	78		148	2	30	30	13	13
Total	27,553 74	2,118 08			29,671 82	213	13	114		175	5	32	33	18	16
Port Burwell	2,361 88	480 49			2,842 37	5									
Quebec	2,768,777 45	1,731,192 20	1,630,585 44	17,080 31	6,147,635 40	29,414	4,163	5,363	1,872	16,536	12,276	414	247	1,950	2,101
Amherst Harbour	33 61	27 41			61 02	16	1	8				1	1	154	158
Amos	50,940 63	16,285 29			67,225 92	476		212		552	3				
Bonne Esperance	225 92	47 28			273 20	57	97					28	28	12	11
Havre St. Pierre	4 13	32 33			36 46	4		10						59	59
Levis	25,106 88	31,741 89	19,243 68	1,200 00	77,292 45	1,154		477	177	1,307	39	3		67	70
Montmagny	20,505 26	46,536 56			67,041 82	615	2	471		789	20			4	5
Pointe-au-Pic	43,510 95	10,030 23			53,541 18	325	3	64		368	19	1	3	2	
Port Menier	368 86	216 33			585 19	10		20						137	136
Riviere-du-Loup	17,104 07	18,150 96		154 00	35,409 03	408	1	296		514	8			134	135
St. Anselme	861 23	906 70			1,767 93										
Trois Pistoles	2,961 91	3,009 01			5,970 92	146		113						3	3
Estcourt	768 15	937 97		72 39	1,778 51	59	4	76		134	11				
Grindstone	291 65	324 96			616 61	34		22						129	122
Les Escoumains														12	10
Harrington Harbour	6 54	50			7 04	4	1					1	1	37	37
Monk	1,882 52	501 17			2,383 69	66		27		102	7				
Morriset Station		36 40			36 40			2							
Sault au Mouton														10	79
Seven Islands							8					2	8	73	66
St. Pamphile	10 67	272 53			283 20	32	22	5		8	25				
Total	2,933,360 43	1,860,249 72	1,649,829 12	18,506 70	6,461,945 97	32,820	4,302	7,166	2,049	20,310	12,408	450	288	2,783	2,992
Rimouski	14,729 23	16,399 61		566 15	31,694 99	495	4	498		757	40	5	5	83	85
Matane	568 23	3,926 07			4,494 30	45	34	133		61	1	34	34	158	163
St. Anne des Monts	68 14	293 20			361 34	11	2	50				2	2	26	30
Mont Louis							27					27	27		
Total	15,365 60	20,618 88		566 15	36 550 63	551	67	681		818	41	68	68	267	278
Shawinigan Falls	176,401 85	60,342 57	79 00	210 00	237,033 42	2,663		484	4	3,697	6				
Grand' Mère	78,495 07	33,580 11	173 76	20 00	112,268 94	1,365		231	5	1,477	13				
Total	254,896 92	93,922 68	252 76	230 00	349,302 36	4,028		715	9	5,174	19				

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

QUEBEC—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Sherbrooke	654,424 52	371,584 29	8,801 24	776 32	1,035,586 37	8,721	336	1,540	182	8,806	134				
Armstrong	6,285 14	2,517 73		54 00	8,856 87	330	706	9							
Beauceville	6,188 80	10,291 78			16,480 58	258	4	219		416	10				
Comins Mills	2,376 46	982,75		7 00	3,366 21	139	284	4							
Cookshire	11,164 37	9,170 51	956 84	80 00	21,371 72	282		206	15	253	6				
Richmond	52,536 53	35,750 66		220 25	88,507 44	1,419	1	329		1,399	24				
St. Camille	746 31	938 96		70 50	1,755 77	85	21	29		753	6				
Thetford Mines	45,475 87	21,447 29	1,777 80	35 84	68,736 80	1,080		411	14	1,271	14				
Victoriaville	72,514 39	98,954 83	390 56	22 55	171,882 33	1,301		749	5	1,473	10				
Windsor Mills	66,514 30	8,882 90			75,397 20	524		62		677	3				
Chartierville							221								
Hereford Road	696 97	100 56			797 53	43	170								
Total	918,923 66	560,622 26	11,926 44	1,266 46	1,492,738 82	14,182	1,743	3,558	216	15,048	207				
Sorel	33,970 38	25,418 01	6,092 72	610 40	66,091 51	943	5	432	84	1,114	72	7	6	750	746
Nicolet	13,685 69	7,376 47			21,062 16	439	226	182		358					
Total	47,656 07	32,794 48	6,092 72	610 40	87,153 67	1,382	231	614	84	1,472	72	7	6	750	746
Sutton	38,160 27	9,274 92	198 00	5,212 40	52,845 59	801	13,827	278	2	2,115	33,889				
Abercorn	3,190 63	1,078 32		1,160 00	5,428 95	276	843	14		29	13				
Highwater	6,377 95	2,649 92		1,028 89	10,056 76	210	727	2		15					
Mansonville	1,226 93	833 64		84 00	2,144 57	153	386	85		62	73				
Total	48,955 78	13,836 80	198 00	7,485 29	70,475 87	1,440	15,783	379	2	2,221	33,975				
St. Armand	27,120 66	3,371 59		3,671 05	34,163 30	805	22,247	22		705	13,833				
Philipsburg	11,337 28	1,062 57			12,399 85	212	311			119	1				
Total	38,457 94	4,434 16		3,671 05	46,563 15	1,017	22,558	22		824	13,834				
St. Hyacinthe	161,997 28	91,979 19	25,395 38	900 50	280,272 35	3,179		1,118	487	3,121	46				
Drummondville	491,386 99	58,182 44	45 00	110 00	549,724 43	3,363	13	245	2	3,083	56				
Marieville	22,404 04	39,620 20			62,024 24	926		110		641	7				
St. Cesaire		3,202 65			3,202 65			178							
Total	675,788 31	192,984 48	25,440 38	1,010 50	895,223 67	7,468	13	1,651	489	6,845	109				

St. Johns	520,313 65	159,017 32	1,628 70	7,650 13	688,609 80	4,664	455	594	78	4,732	155			2	3
Cantic	15,054 93	1,601 45		1,138 94	17,795 32	1,221	52,461	4		14,990	48,314				
Clarenceville	588 49	309 21		165 04	1,062 74	31	102	22		3					
Cowansville	120,446 74	28,268 42		60 00	148,775 16	1,301		150		1,144	46				
Farnham	28,648 75	18,175 91	33,573 67	1 65	80,399 98	913		230	242	1,013	44				
Frelighsburg	1,367 42	523 19		1,103 44	2,994 05	114	954	63		17					
Lacolle	50,732 87	21,989 28		6,116 14	78,838 29	1,338	20,389	32		7,222	16,605				
Noyan	4,589 52	1,414 99		18 00	6,022 51	343	12,451			582	3,955				
St. Andre Road	1,036 08	190 24		844 99	2,071 31	120	541								
Total	742,778 45	231 490 01	35,202 37	17,098 33	1,026,569 16	10,045	87,353	1,095	320	29,703	69,119			2	3
Three Rivers	549,076 46	199,932 42	640 92	110 00	749,759 80	6,280	115	1,161	41	7,628	65	205	213	1,748	1,738
La Tuque	55,356 71	11,508 23			66,864 94	722		173		772	9				
St. Boniface		2,448 08	16,950 00		19,398 08			49	166						
Total	604,433 17	213,888 73	17,590 92	110 00	836,022 82	7,002	115	1,383	207	8,400	74	205	213	1,748	1,738
Valleyfield	73,469 86	90,354 26	12,195 49	1,442 13	177,461 74	2,400		384	34	2,408	26			140	145
Quebec Totals	**44,528,477 87**	**31,343,566 69**	**38,617,252 40**	**197,945 12**	**114,687,242 08**	**430,209**	**258,094**	**57,609**	**27,465**	**307,070**	**293,749**	**4,191**	**3,873**	**54,343**	**49,515**

ONTARIO

Amherstburg	44,072 91	10,168 95		1,619 00	55,860 86	534	13,038	133		830	1			1,662	1,658
Essex Centre	16,594 02	9,013 14			25,607 16	615		138		691	8				
Kingsville	20,637 74	23,063 76	1,070 60		44,772 10	705	2,856	309	254	942	19			619	620
Leamington	243,421 83	19,810 66	15,147 75	30 00	278,410 24	2,224		248	53	2,081	12			398	396
West Dock	5,059 87	10 03			5,929 34	252	405	4		13	10			483	483
North Dock	44 06	869 47			54 09										
Total	329,830 43	62,936 01	16,218 35	1,649 00	410,633 79	4,330	16,299	832	307	4,557	50			3,162	3,157
Belleville	427,468 20	236,555 52	3,943,081 92	19,594 28	4,626,699 92	4,872	322	1,290	7,236	5,460	203			346	344
Campbellford	10,369 15	5,584 28			15,953 43	595		168		721	1			22	22
Total	437,837 35	242,139 80	3,943,081 92	19,594 28	4,642,653 35	5,467	322	1,458	7,236	6,181	204			368	366
Bowmanville	120,994 48	259,590 93		350 00	380,935 41	1,689	322	256		1,258	14				
Brantford	564,350 00	455,051 55	10,376 24	2,582 42	1,032,360 21	13,773	166	1,806	126	12,535	125				
Bridgeburg	749,742 39	186,212 06		30,368 99	966,323 44	16,771	84,300	619		20,511	211,246			952	975
Brockville	148,458 17	82,256 33		1,402 53	232,117 03	3,046	1,197	427		2,555	33			851	852

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—**Continued**

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Chatham	555,882 30	122,999 30	1,052 69	776 87	680,711 16	7,709	11	1,153	48	6,084	83	.....	.....	108	105
Blenheim	35,942 73	7,712 44	.....	.....	43,655 17	430	.....	63	.....	868	3	.....	.....	.....	.....
Erieau	189,337 01	588 47	.....	.....	189,925 48	2,370	1,143	12	.....	456	1,843	.....	.....	305	323
Ridgetown	6,047 15	3,500 98	.....	.....	9,548 13	886	.....	214	.....	993	7	.....	.....	.....	.....
Tilbury	77,245 70	2,028 93	.....	60 00	79,334 63	1,374	.....	66	.....	1,131	6	.....	.....	2	2
Dresden	162 19	31 75	.....	.....	193 94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	864,617 08	136,861 87	1,052 69	836 87	1,003,368 51	12,769	1,154	1,508	48	9,532	1,942	.....	.....	415	430
Cobourg	229,348 23	39,998 41	16,258 44	1,033 56	286,638 64	3,093	6,970	529	37	2,690	7,043	.....	.....	649	672
Brighton	4,707 71	10,177 29	.....	97 60	14,982 60	267	.....	202	.....	299	6	.....	.....	1	1
Colborne	994 32	1,992 13	.....	.....	2,986 45	158	.....	97	.....	140	6	.....	.....	.....	.....
Total	235,050 26	52,167 83	16,258 44	1,131 16	304,607 69	3,518	6,970	828	37	3,129	7,055	.....	.....	650	673
Collingwood	22,210 24	21,814 20	25 00	800 00	44,849 44	1,088	.....	1,057	1	1,291	436	.....	.....	64	67
Meaford	5,952 07	17,397 04	.....	.....	23,349 11	413	.....	240	.....	529	1	.....	.....	51	48
Total	28,162 31	39,211 24	25 00	800 00	68,198 55	1,501	.....	1,297	1	1,820	437	.....	.....	115	115
Cornwall	193,589 72	93,069 74	635 84	70 80	287,366 10	3,237	8,813	509	6	5,842	7,620	.....	.....	126	73
Aultsville	2,666 11	797 28	.....	229 09	3,692 48	247	501	26	.....	143	.....	.....	.....	58	58
St. Regis	435 32	114 08	.....	90 00	639 40	42	10	.....	.....	.....	.....	.....	.....	.....	.....
Total	196,691 15	93,981 10	635 84	389 89	291,697 98	3,526	9,324	535	6	5,985	7,620	.....	.....	184	131
Deseronto	6,392 54	7,768 68	.....	92 60	14,253 82	416	1	58	.....	376	.....	.....	.....	11	11
Fort Francis	377,137 70	66,337 32	9,650 88	2,642 28	455,768 18	5,077	28,657	217	19	14,071	32,496	.....	.....	.....	.....
Rainy River	14,356 53	1,394 12	.....	64 80	15,815 45	406	261	55	.....	6,049	6,393	.....	.....	15	17
Total	391,494 23	67,731 44	9,650 88	2,707 08	471,583 63	5,483	28,918	272	19	20,120	38,889	.....	.....	15	17
Fort William	1,091,990 44	168,915 92	7,274 71	1,341 38	1,269,522 45	5,888	642	853	50	4,282	3,802	.....	.....	1,458	1,392
Pigeon River	4,877 22	1,980 68	80 40	.....	6,938 30	81	70	.....	.....	300	12	.....	.....	1	1
Total	1,096,867 66	170,896 60	7,355 11	1,341 38	1,276,460 75	5,969	712	853	50	4,582	3,814	.....	.....	1,459	1,393

Galt	278,581 76	314,238 83		241 53	593,062 12	5,242	162	2,003		5,623	72				
Ayr	85,625 28	4,416 66			90,041 94	331		78		336					
Preston	132,967 83	177,406 55	7,327 92		317,702 30	2,426		593	10	2,841	12				
Total	497,174 87	496,062 04	7,327 92	241 53	1,000,806 36	7,999	162	2,674	10	8,800	84				
Gananoque	71,809 13	15,021 50		321 50	87,152 13	1,414	298	317		1,339	17			3,065	3,065
Rockport	1,998 68	473 09		244 00	2,715 77	69	27	1						595	595
Ivy Lea	27 04	5 87			32 91	5	28							239	239
Lansdowne	15 8	3 21			19 03	4	1							1,568	1,568
Total	73,850 67	15,503 67		565 50	89,919 84	1,492	354	318		1,339	17			5,467	5,467
Goderich	23,981 15	18,272 79	2 00	1,161 50	43,417 44	942		580	1	1,033	1,575			97	91
Clinton	13,273 25	14,394 92			27,668 17	624		227		649	3				
Kincardine	44,804 98	41,314 08		75 00	86,194 06	904		206		1,028	19			17	16
Seaforth	4,127 03	3,356 32			7,483 35	515		199		517					
Southampton	11,647 83	32,572 82			44,220 65	550		111		778	3				
Wingham	15,570 36	31,672 20			47,242 56	724		423		830	11				
Lucknow	30 83	6 38			37 21										
Total	113,435 43	141,589 51	2 00	1,236 50	256,263 44	4,259		1,746	1	4,835	1,611			114	107
Guelph	389,131 86	512,867 74	99,959 97	3,550 00	1,005,509 57	8,083		2,003	385	8,234	66				
Hanover	37,287 82	115,005 01	194 00		152,486 83	1,360		450		1,686	5				
Walkerton	13,090 60	23,344 41	388 46		36,823 47	413		219	4	658	8				
Durham	55 44	8 08			63 52	12									
Mount Forest	162 90	21 71			184 61	12									
Total	439,728 62	651,246 95	100,542 43	3,550 00	1,195,068 00	9,880		2,672	389	10,578	79				
Hamilton	4,194,037 31	3,477,119 62	3,532,231 87	4,939 24	11,208,328 04	*59,870	551	6,517	2,000	45,865	655			691	552
Burlington	19,997 01	10,611 38			30,608 39	783		165		1,002	9				
Dundas	78,483 29	57,022 88			135,506 17	1,774	2	334		1,738	10				
Dunnville	43,389 97	93,646 88			137,036 85	1,033	100	210		1,088	14			6	6
Grimsby	39,674 24	36,235 62		185 00	76,094 86	973	22	349		944	7				
Oakville	23,147 88	27,254 07			50,401 95	860		258		1,117	6				
Port Maitland	40,398 96	2,731 09		2 40	43,132 45	83	2,937			38	8,192			287	284
Total	4,439,128 66	3,704,621 54	3,532,231 87	5,126 64	11,681,108 71	65,376	3,612	7,833	2,000	51,792	8,893			984	842
Ingersoll	77,016 26	31,199 83		200 00	108,416 09	2,369		483		2,191	14				
Kenora	82,106 71	25,427 87	2,151 83	641 26	110,327 67	1,534	179	454	17	1,240	16			187	182
Dryden	3,793 56	18,391 02			22,184 58	236		90		191	4				
Total	85,900 27	43,818 89	2,151 83	641 26	132,512 25	1,770	179	544	17	1,431	20			187	182
Kingston	261,417 14	201,333 79	24,660 05	712 10	488,123 08	5,448	677	1,001	114	1,501	146			1,619	1,550
Wolfe Island						42	17	11						23	20
Port Alexandria	449 83	152 01			601 84		230							174	195
Portsmouth							56							70	71
Total	261,866 97	201,485 80	24,660 05	712 10	488,724 92	5,490	980	1,012	114	1,501	146			1,886	1,836

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—Continued

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Kitchener	739,871 33	619,909 67	34,074 61	1,037 94	1,394,893 55	10,070	.....	3,319	377	10,870	115	.....	.....	.....	.....
Elmira	21,436 93	29,858 97	.....	50 00	51,345 90	777	.....	153	.....	978	6	.....	.....	.....	.....
New Hamburg	11,498 39	15,349 98	.....	.....	26,848 37	504	.....	231	.....	557	1	.....	.....	.....	.....
Waterloo	405,138 05	237,712 74	809,637 09	8,405 27	1,460,893 15	2,357	.....	668	669	3,483	25	.....	.....	.....	.....
Total	1,177,944 70	902,831 36	843,711 70	9,493 21	2,933,980 97	13,708	.....	4,371	1,046	15,888	147	.....	.....	.....	.....
Lindsay	104,345 23	51,867 40	12,947 84	1,580 00	170,740 47	1,770	.....	779	332	2,122	21	.....	.....	.....	.....
London	1,675,949 79	1,562,873 97	526,895 99	4,500 57	3,770,220 32	30,397	.....	3,997	2,754	21,161	597	.....	.....	.....	.....
Glencoe	5,182 57	2,837 46	.....	.....	8,020 03	379	.....	97	.....	411	3	.....	.....	.....	.....
Parkhill	13,580 06	3,752 34	.....	.....	17,332 40	401	.....	62	.....	429	8	.....	.....	.....	.....
Strathroy	26,742 56	18,839 49	.....	.....	45,582 05	1,102	.....	241	.....	1,228	11	.....	.....	.....	.....
Total	1,721,454 98	1,588,303 26	526,895 99	4,500 57	3,841,154 80	32,279	.....	4,397	2,754	23,229	619	.....	.....	.....	.....
Midland	106,808 60	32,233 38	.....	1,357 02	140,399 00	1,171	.....	415	.....	953	12,447	.....	.....	276	294
Penetanguishene	12,361 79	20,753 87	.....	200 00	33,315 66	424	1	253	.....	431	2	.....	.....	3	5
Total	119,170 39	52,987 25	.....	1,557 02	173,714 66	1,595	1	668	.....	1,384	12,449	.....	.....	279	299
Morrisburg	3,491 27	7,187 30	.....	951 55	11,630 12	506	427	149	.....	218	2	.....	.....	442	437
Iroquois	9,392 48	7,241 82	.....	.....	16,634 30	268	12	58	.....	274	2	.....	.....	77	77
Total	12,883 75	14,429 12	.....	951 55	28,264 42	774	439	207	.....	492	4	.....	.....	519	514
Napanee	50,308 64	28,085 34	.....	60 00	78,453 98	1,263	.....	296	.....	1,234	54	.....	.....	4	4
Bath	138 62	161 72	.....	.....	300 34	64	.....	37	.....	26	.....	.....	.....	141	141
Total	50,447 26	28,247 06	.....	60 00	78,754 32	1,327	.....	333	.....	1,260	54	.....	.....	145	145
Niagara Falls	1,517,102 41	558,281 87	1,018 96	20,219 65	2,096,622 89	20,767	90,335	1,182	74	285,576	120,999	.....	.....	.....	.....
Chippewa	11,117 68	1,208 02	.....	.....	12,325 70	792	.....	17	.....	1,044	1	.....	.....	42	44
Niagara	808 47	699 28	.....	.....	1,507 75	165	11	42	.....	142	1	.....	.....	1,409	1,407
Queenston Bridge	4,640 78	486 68	.....	.....	5,127 46	137	847	.....	.....	.....	.....	.....	.....	.....	.....
Montrose Yards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98,540	.....	.....	.....	.....
Queenston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	870	870
Total	1,533,669 34	560,675 85	1,018 96	20,219 65	2,115,583 80	21,861	91,193	1,241	74	286,762	219,541	.....	.....	2,321	2,321

North Bay	129,750 49	67,668 14	27 00	61 69	197,507 32	3,391		677	2	3,066	124				
Cobalt	168,841 01	73,676 82			242,517 83	3,316		785		3,434	52				
Cochrane	207,021 53	53,868 98			260,890 51	1,193		332		1,281	25				
Moose Factory	16 89	7 09			23 98	3	6					1	1		
Sturgeon Falls	9,882 80	7,580 93			17,463 73	475		155		389	3				
Timmins	103,186 37	60,293 91			163,480 28	2,606		404		2,662	9				
Temagami	1 53	0 32			1 85	2									
Total	618,700 62	263,096 19	27 00	61 69	881,885 50	10,986	6	2,353	2	10,832	213	1	1		
Orillia	49,625 24	63,862 64		478 10	113,965 98	2,197		631		2,254	24				
Bracebridge	35,372 25	18,777 95			54,150 20	1,246		413		1,590	30				
Bala						4									
Gravenhurst	7,712 16	9,327 98			17,040 14	396		68		601	11				
Huntsville						4									
Lake Joseph						4									
Total	92,709 65	91,968 57		478 10	185,156 32	3,851		1,112		4,445	65				
Oshawa	8,063,136 57	2,476,509 41	27 00	1,030 81	10,540,703 79	30,029	200	557	2	17,993	97				
Ottawa	2,095,760 02	1,344,207 21	188,049 02	14,116 36	3,642,132 61	33,448		4,206	221	18,933	598			102	99
Alexandria	7,958 20	4,569 73			12,527 93	299		173		324	2				
Almonte	3,760 54	8,845 09			12,605 63	490		212		417	2				
Arnprior	11,328 03	21,839 93			33,167 96	437		216		541	1				
Carleton Place	24,187 32	56,315 20			80,502 52	793		185		777	6				
Hawkesbury	34,309 38	9,264 78			43,574 16	759		216		1,059	9				
Mattawa	36,772 13	4,942 13			41,714 26	607		45		686	26				
Pembroke	51,533 77	934,356 60			985,890 37	1,309		620		1,301	38				
Perth	31,287 97	67,247 85	67,569 30	1,257 03	167,362 15	1,412		478	807	1,466	181				
Renfrew	23,415 17	38,161 74		60 00	61,636 91	1,097		325		1,071	4				
Smith's Falls	61,388 86	10,609 16		60 00	72,058 02	1,714		227		2,031	25			28	28
Total	2,381,701 39	2,500,359 42	255,618 32	15,493 39	5,153,172 52	42,365		6,903	1,028	28,606	892			130	127
Owen Sound	85,302 40	158,479 55	2,140 80	56 00	245,978 75	2,047	4	1,129	204	2,337	3,819			366	365
Wiarton	5,529 76	7,088 12			12,617 88	245		190		207	10			16	19
Chesley	60 59	11 28			71 87										
Total	90,892 75	165,578 95	2,140 80	56 00	258,668 50	2,292	4	1,319	204	2,544	3,829			382	384
Paris	47,204 18	215,391 55		195 50	262,791 23	1,348		263		1,341	15				
St. George	2,975 37	124 82			3,100 19	103		34		95	1				
Total	50,179 55	215,516 37		195 50	265,891 42	1,451		297		1,436	16				
Parry Sound	12,573 32	6,169 85		170 40	18,913 57	578		697		595	14			97	96
Byng Inlet	226,363 38	80 41			226,443 79	219				73	4			101	102
Depot Harbour	596 77	96 43			693 20	72	48			6,344	9,112			130	129
Key Harbour	60,332 88				60,332 88	26	1							22	22
Burks Falls		7,268 49			7,268 49			103							
Point au Baril	9 98	1 73			11 71	2									
Algonquin Park	29 18	4 14			33 32	3				17					
Total	299,905 51	13,621 05		170 40	313,696 96	900	49	800		7,029	9,130			350	349

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—Continued

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Peterboro	1,220,696 06	505,920 58	352 72	433 85	1,727,403 21	10,080	46	1,172	9	11,239	83				
Picton	8,869 70	20,734 42	2 00	400 00	30,006 12	488		430	1	525	6			227	227
Wellington	1,099 03	1,362 25			2,461 28	157		36		171	2				
Total	9,968 73	22,096 67	2 00	400 00	32 467 40	645		466	1	696	8			227	227
Port Arthur	434,135 04	155,798 60	14,693 00	1,028 56	605,655 20	3,730	834	578	76	3,191	894			1,390	1,514
Port Hope	49,552 48	27,602 78	1,861 75	121 00	79,138 01	1,263	27	415	21	1,505	9			10	10
Port McNicoll	5,153 07	712 03		489 15	6,354 25	312	5	80		178	9,784			280	287
Prescott	457,361 53	122,653 14	403,192 32	3,900 97	987,107 96	3,472	10,427	356	695	7,379	9,578			1,186	1,054
Cardinal	25,373 27	40,641 95			66,015 22	357	2	34		499	1			63	63
Maitland	40 70	8 78			49 48	15	208							221	221
Total	482,775 50	163,303 87	403,192 32	3,900 97	1,053,172 66	3,844	10,637	390	695	7,878	9,579			1,470	1,338
Sarnia	795,980 45	2,108,415 26	36,259 97	8,236 16	2,948,891 84	9,815	42,176	859	106	126,137	301,639			1,330	1,329
Courtright	8,079 70	501 24			8,580 94	238	780	13		54	15			311	311
Petrolia	42,675 44	7,978 27	1 00		50,654 71	901		345	1	1,855	7				
Point Edward	11,024 92	402 13			11,427 05	450	799			157	30			756	759
Stag Island	1,090 98	209 84			1,300 82	20	1							367	367
Total	858,851 49	2,117,506 74	36,260 97	8,236 16	3,020,855 36	11,424	43,756	1,217	107	128,203	301,691			2,764	2,766
Sault Ste. Marie	686,770 29	436,706 03	12,688 84	4,049 96	1,140,215 12	6,480	11,940	565	35	8,240	12,853			1,287	1,551
Blind River	103,638 02	19,587 10			123,225 12	445	63	72		463	12			161	159
Bruce Mines	314 24	785 51			1,099 75	73	1	60		71	13			142	140
Cockburn Island	275 56	53 29			328 85	15	32	7						159	157
Cutler	181 68	56 36			238 04	54		19		24	1			187	186
Gore Bay	463 58	1,198 06			1,661 64	81	63	63		2				505	508
Little Current	75,372 40	1,012 62			76,385 02	265	30	87		164	13			323	320
Michipicoten Harbour							16							18	18
Thessalon	1,980 45	1,426 92			3,407 37	147	55	47		185	11			336	337
Burnt Island							71							80	76
Hilton Beach		59 42			59 42		13	12						386	386
Kagawong							4							4	4
Manitowaning	87 74	33 57			121 31	8		12						213	213
Meldrum Bay							68							178	168
Providence Bay	47 31	19 85			67 16	5	90	1						138	136

Richards Landing	6 56	117 39			123 95	6		13						465	465
Spanish Mills							21							15	15
Total	869,137 83	461,056 12	12,688,84	4,049 96	1,346,932 75	7,579	12,467	958	35	9,149	12,903			4,597	4,839
Simcoe	114,276 89	53,404 12	27 00	818 46	168,526 47	1,933		449	2	1,807	14				
Port Dover	7,263 91	8,374 97		112 85	15,751 73	430	1,441	88		452	2			504	506
Port Rowan	714 36	1,364 37			2,078 73	75		116		131					
Total	122,255 16	63,143 46	27 00	931 31	186,356 93	2,438	1,441	653	2	2,390	16			504	506
Stratford	282,232 44	252,950 68	1,206 92	135 92	536,525 96	4,648		1,221	17	5,370	44				
Listowel	36,424 50	30,781 31	495 47		67,701 28	1,572		214	27	1,891	36				
Mitchell	7,877 56	8,339 36			16,216 92	423		197		445					
St. Mary's	50,366 52	66,450 52			116,817 04	1,074		299		2,178	2				
Total	376,901 02	358,521 87	1,702 39	135 92	737,261 20	7,717		1,931	44	9,884	82				
Sudbury	120,303 73	153,654 66	26,411 30	2 40	300,372 09	2,646		794	35	2,707	66				
Coniston	10,379 77	3,679 13			14,058 90	262		34		249	4				
Copper Cliff	16,762 99	3,859 17			20,622 16	412		6		487	1				
Espanola	8,527 31	1,318 69			9,846 00	450		31		427	13				
Total	155,973 80	162,511 65	26,411 30	2 40	344,899 15	3,770		865	35	3,870	84				
St. Catharines	474,196 60	375,936 71	31,911 23	104 00	882,148 54	7,401	24	1,391	245	8,344	55				
Port Dalhousie	8,507 69	747 11			9,254 80	468	829	39		317	1			795	787
Thorold	208,936 12	64,255 37			273,191 49	3,961	12	342		6,335	16			98	98
Total	691,640 41	440,939 19	31,911 23	104 00	1,164,594 83	11,830	865	1,972	245	14,996	72			893	835
St. Thomas	269,384 37	124,566 21	1,641 81	1,577 60	397,169 99	4,600		891	94	7,086	60				
Aylmer	43,147 18	7,984 07			51,131 25	906		193		936	11				
Port Stanley	39,279 74	7,157 05			46,436 79	319	275	10		367	2,381			239	194
Talbot Yards											1,073				
Total	351,811 29	139,707 33	1,641 81	1,577 60	494,738 03	5,825	275	1,094	94	8,389	3,525			239	194
Tilsonburg	82,204 09	31,638 99			113,843 08	1,619		416		1,487	10				
Port Burwell	157,147 73	405 41		8 40	157,561 54	576	60	81		1,072	2,618			25	24
Total	239,351 82	32,044 40		8 40	271,404 62	2,195	60	497		2,559	2,628			25	24
Toronto	37,524,081 72	18,886,627 09	2,176,841 92	60,015 76	58,647,566 49	312,730	4,208	36,245	7,887	137,828	7,280			1,311	976
Acton	39,171 92	11,346 32			50,518 24	1,173		141		1,103	4				
Alliston	6,193 65	6,605 35	208 40	40 00	13,047 40	347		217	4	426	8				
Aurora	16,614 58	25,375 25			41,989 83	668		172		818	2				
Barrie	84,673 36	35,328 30		350 00	120,351 66	1,571		248		1,651	8				
Brampton	113,622 36	86,911 32			200,533 68	1,850		396		2,568	15				
Georgetown	42,382 04	17,434 51			59,816 55	1,108		276		1,265	12				
Newmarket	50,092 28	45,636 86			95,729 14	1,497		226		1,922	11				
Orangeville	15,415 91	22,966 60			38,382 51	1,084		278		1,225	25				
Port Credit	44,859 80	11,704 54			56,564 34	789	73	233		1,953	16			24	24
Streetsville	20,694 40	4,555 41			25,249 81	620		64		962	9				
West Toronto	3,771,940 09	144,850 98		476 50	3,917,267 57	27,290	162	139		25,811	388				
Markdale	80 79	15 50			96 29	12									
Milton West	13 39	2 68			16 07	6									
Total	41,729,836 29	19,299,360 71	2,177,050 32	60,882 26	63,267,129 58	350,745	4,443	38,635	7,891	177,532	7,778			1,335	1,000

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

ONTARIO—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Trenton	69,692 66	30,103 40	.....	26 60	99,822 66	2,324	7	262	.....	2,395	19	.....	.....	58	60
Wallaceburg	511,613 82	19,542 87	52 00	647 20	531,855 89	1,266	.....	202	20	2,363	23	.....	.....	191	179
Port Lambton	2,545 24	517 02	.....	.....	3,062 26	132	6,938	.....	.....	24	.....	.....	.....	54	47
Sombra	1,607 47	596 49	.....	.....	2,203 96	72	4,046	.....	.....	17	2	.....	.....	47	44
Walpole Island	643 89	151 56	.....	.....	795 45	41	64	.....	.....	.....	.....	.....	.....	12	14
Total	516,410 42	20,807 94	52 00	647 20	537,917 56	1,511	11,048	202	20	2,404	25	.....	.....	304	284
Welland	371,981 20	127,199 86	11,765 79	649 84	511,596 69	5,897	14	672	91	7,812	107	.....	.....	117	92
Port Colborne	268,041 39	25,670 55	.....	650 00	294,361 94	3,610	6,947	312	.....	3,817	88	.....	.....	2,767	2,850
Total	640,022 59	152,870 41	11,765 79	1,299 84	805,958 63	9,507	6,961	984	91	11,629	195	.....	.....	2,884	2,942
Whitby	13,419 50	14,941 54	1 00	200 00	28,562 04	784	190	388	1	1,099	14	.....	.....	83	85
Windsor	3,168,289 94	1,749,321 81	93,772 49	37,082 64	5,048,466 88	38,991	58,535	2,474	513	269,607	485,391	.....	.....	292	259
Belle River	5,568 46	1,933 45	.....	.....	7,501 91	250	300	82	.....	288	8	.....	.....	299	298
Sandwich	210,753 09	14,947 98	.....	.....	225,701 07	1,180	46,827	240	.....	787	42	.....	.....	6,163	6,166
Walkerville	6,075,075 71	1,981,236 19	3,012,089 12	20,322 06	11,088,723 08	43,699	39,852	1,376	5,000	8,447	1,825	.....	.....	5,342	4,837
Total	9,459,687 20	3,747,439 43	3,105,861 61	57,404 70	16,370,392 94	84,120	145,514	4,172	5,513	279,129	487,266	.....	.....	12,096	11,560
Woodstock	184,081 21	186,468 96	.....	462 08	371,012 25	5,346	107	815	.....	4,630	133	.....	.....	.....	.....
Norwich	3,210 30	8,544 12	3,364 68	.....	15,119 10	411	.....	238	59	389	2	.....	.....	.....	.....
Total	187,291 51	195,013 08	3,364 68	462 08	386,131 35	5,757	107	1,053	59	5,019	135	.....	.....	.....	.....
Ontario Totals	**85,960,295 36**	**44,179,726 73**	**15,142,798 91**	**273,709 58**	**145,556,530 58**	**869,481**	**485,547**	**111,352**	**30,742**	**1,262,964**	**1,366,260**	**1**	**1**	**59,105**	**49,214**

MANITOBA

Brandon	157,475 09	96,119 67	17,783 00	1,666 44	273,044 20	3,134		473	101	2,884	83				
Bannerman	1,653 61	975 25			2,628 86	131	476	6		281	1,599				
Boissevain	1,998 82	1,266 77			3,265 59	122		30		136	4				
Cartwright	1,494 41	911 16		25 00	2,430 57	99	38	14		20	2				
Deloraine	3,478 43	2,279 57			5,758 00	184	2	56		129	4				
Killarney	1,194 24	1,487 99		25 00	2,707 23	121	9	45		50	1				
Melita	2,487 93	2,951 42			5,439 35	131		39		75	3				
Souris	7,949 50	5,141 95			13,091 45	328		58		310	1				
Virden	10,212 20	7,049 62			17,261 82	362		37		260	9				
Lyleton	80 98	20 38			101 36	19	59								
Oaklake	28 05	5 13			33 18										
Rapid City	57 71	8 31			66 02										
Waskada	1,566 37	436 65		2,511 99	4,515 01	34	4	15							
Total	189,677 34	118,653 87	17,783 00	4,228 43	330,342 64	4,665	588	773	101	4,145	1,706				
Emerson	87,610 65	27,053 96		4,716 19	119,380 80	2,056	29,004	24		3,333	70,343				
Gretna	12,944 18	5,228 31		198 41	18,370 90	417	423	41		177	199				
Haskett	1,145 84	816 88			1,962 72	184	1,090	12		406	581				
Total	14,090 02	6,045 19		198 41	20,333 62	601	1,513	53		583	780				
Portage la Prairie	10,667 42	20,370 30	2 00	1,601 00	32,640 45	897		235	1	763	6				
Dauphin	15,339 15	10,592 93		705 00	26,637 08	777		212		719	18				
Minnedosa	2,285 11	3,813 65			6,098 76	186		147		150	2				
Neepawa	2,462 92	3,639 34			6,102 26	198		128		220	7				
The Pas	64,567 23	35,847 41		50 00	100,464 64	408		95		380	4				
Birtle	79 81	16 59			96 40	12									
Gladstone	110 73	17 71			128 44	12									
Total	95,512 37	74,297 66	2 00	2,356 00	172,168 03	2,490		817	1	2,232	37				
Winnipeg	9,023,230 36	3,962,799 55	801,415 30	12,139 44	13,799,584 65	104,030		5,908	3,997	67,799	1,029				
Crystal City	764 35	648 78			1,413 13	106	17	25		74					
Morden	2,700 11	3,028 26			5,728 37	201		79		199	5				
Selkirk	4,955 84	1,781 30			6,737 14	322		80		346	1				
Sprague	15,785 87	4,617 49		14 50	20,417 86	517	363	12		3,932	3,888				
York Factory												2	2	6	6
Chesterfield Inlet	2,007 03	226 77			2,233 80										
Mowbray	219 06	69 56			288 62	50	340								
Manitou	71 87	12 87			84 74										
Pilot Mound	2 70	0 88			3 58										
Piney	227 04	17 23			244 27	16									
Port Nelson		4 00			4 00			2						10	8
Snowflake	704 94	307 87			1,012 81	34	285	12		75	1				
Total	9,050,669 17	3,973,514 56	801,415 30	12,153 94	13,837,752 97	105,276	1,005	6,118	3,997	72,425	4,924	2	2	16	14
Manitoba Totals	**9,437,559 55**	**4,199,565 24**	**819,200 30**	**23,652 97**	**14,479,978 06**	**115,088**	**32,110**	**7,785**	**4,099**	**82,718**	**77,790**	**2**	**2**	**16**	**14**

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

SASKATCHEWAN

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Moose Jaw	305,395 11	211,698 98	27,712 00	6,040 69	550,846 78	5,224		573	41	4,224	55				
Big Muddy	3,647 81	886 89		106 43	4,641 13	160	221	4							
Climax	4,772 01	2,119 33		901 56	7,792 90	277	31			31	7				
Gull Lake	1,211 71	1,117 52			2,329 23	34		16		26	3				
Maple Creek	3,186 22	3,644 29			6,830 51	156		42		114	4				
Shaunavon	13,001 56	7,166 77		760 70	20,929 03	393		48		349	7				
Swift Current	55,836 17	25,168 33		277 82	81,282 32	1,366		76		1,132	25				
West Poplar River	2,353 25	422 22		156 60	2,932 07	92	23	3							
Weyburn	49,079 57	25,043 15		15 00	74,137 72	980		92		1,009	23				
Willow Creek	3,871 38	1,341 82		37 30	5,250 50	93	2								
Bengough	1,537 54	694 32		2,317 40	4,549 26	63	18								
East Poplar River	4,572 75	1,432 81		264 41	6,269 97	198	23	1							
Total	448,465 08	280,736 43	27,712 00	10,877 91	767,791 42	9,036	318	855	41	6,885	124				
North Portal	15,872 29	6,294 65		1,408 75	23,575 69	862	14,239	16		8,485	22,251				
Estevan	35,544 15	29,086 57	25 00	1,208 49	65,864 21	916	7	219		847	12				
Marienthal	5,759 83	2,310 35		186 48	8,256 66	286	50								
Sybouts	1,228 53	319 75			1,548 28	60									
Total	58,404 80	38,011 32	25 00	2,803 72	99,244 84	2,124	14,296	235		9,332	22,263				
Prince Albert	45,499 05	112,959 44	19,824 16	198 25	178,480 90	1,047		739	32	961	10				
Humboldt	8,295 30	10,900 93			19,196 23	419		92		314	6				
Melfort	7,908 72	13,088 27			20,996 99	431		68		281	8				
Rosthern	1,774 86	2,319 96			4,094 82	154		33		120					
Total	63,477 93	139,268 60	19,824 16	198 25	222,768 94	2,051		932	32	1,676	24				
Regina	2,234,108 31	589,194 94	483,465 53	6,796 45	3,313,565 23	18,352		1,551	591	18,183	164				
Melville	6,111 78	4,466 63		15 40	10,593 81	289		93		248	3				
Moosomin	9,663 39	5,590 06			15,253 45	185		54		174	5				
Northgate	4,152 20	1,870 05		473 62	6,495 87	183	180	22		58	4,268				
Yorkton	46,409 03	29,697 13			76,106 16	1,028		134		1,055	14				
Arcola	111 74	21 75			133 49										
Broadview	40 90	7 71			48 61										
Elmore	4,081 24	2,176 89			6,258 13	151	33	9							
Fort Qu'Appelle	258 16	48 06			306 22										
Grenfell	56 77	10 57			67 34										
Indian Head	241 96	44 24			286 20										
Qu'Appelle	66 65	13 94			80 59										
Wapella	15 27	2 50			17 77										
Wolseley	109 91	22 19			132 10										
Total	2,305,427 31	633,166 66	483,465 53	7,285 47	3,429,344 97	20,188	213	1,863	591	19,718	4,454				

Saskatoon	709,003 56	359,720 29	35,917 53	3,402 93	1,108,044 31	11,382		1,019	78	8,494	169				
North Battleford	42,933 92	40,174 86			83,108 78	1,219		289		1,129	15				
Total	751,937 48	399,895 15	35,917 53	3,402 93	1,191,153 09	12,601		1,308	78	9,623	184				
Saskatchewan, Totals	**3,627,712 60**	**1,491,078 16**	**566,944 22**	**24,568 28**	**5,710,303 26**	**46,000**	**14,827**	**5,193**	**742**	**47,234**	**27,049**				
ALBERTA															
Calgary	2,099,068 94	1,116,050 52	318,948 21	3,298 55	3,537,366 22	24,410		3,428	1,177	13,491	379				
Banff	24,653 46	8,041 85		24 80	32,720 11	533		94		375	27				
Drumheller	28,829 14	8,188 14			37,017 28	944		92		519	6				
Red Deer	27,344 88	14,612 23		150 00	42,107 11	810		233		864	12				
Canmore	114 41	23 29			137 70										
Claresholm	486 35	93 25			579 60										
Okotoks	61,855 07	9,429 88			71,284 95	649		25		658	9				
Total	2,242,352 25	1,156,439 16	318,948 21	3,473 35	3,721,212 97	27,346		3,872	1,177	15,907	433				
Edmonton	1,560,272 48	875,649 69	237,761 19	2,433 24	2,676,116 60	18,905		3,393	652	12,469	197				
Camrose	29,102 38	19,810 90		455 16	49,368 44	870		265		779	13				
Edson	9,275 20	2,297 24			11,572 44	326		27		294	13				
Herschel Island	19,691 25	4,111 05			23,802 30										
Vegreville	5,404 41	5,712 50			11,116 91	215		75		209	14				
Vermilion	3,580 02	10,936 33			14,516 35	237		151		184	5				
Wainwright	12,631 04	6,142 04			18,773 08	308		50		251	9				
Wetaskiwin	6,520 07	7,814 89			14,334 96	252		208		261	2				
Grand Prairie	677 01	138 15			815 16										
Jasper (baggage)	127 19	19 16			146 35										
Jasper (P.O.)	411 04	77 43			488 47										
Total	1,647,692 09	932,709 38	237,761 19	2,888 40	2,821,051 06	21,113		4,169	652	14,447	253				
Lethbridge	150,498 21	235,094 28	93,897 71	523 99	480,014 19	3,072		574	137	2,552	52				
Blairmore	32,211 67	16,201 18		27 84	48,440 69	367		99		456					
Cardston	18,856 50	5,848 63		20 00	24,725 13	372		108		342	5				
Coutts	46,313 28	33,744 10		225 72	80,283 10	1,150	1,508	54		1,127	3,999				
Macleod	14,349 64	4,140 41		151 55	18,641 60	428		48		529	39				
Pinhorn	570 35	166 40			736 75	8	13								
Twin Lakes	632 43			70 00	702 43	17	29								
Carway	435 15	70 43		287 94	793 52	65	29								
Wild Horse	165 12	27 34		50 00	242 46	22	3								
Waterton Lakes Park	7 00	21 08		120 00	148 08	1	1	2							
Total	264,039 35	295,313 85	93,897 71	1,477 04	654,727 95	5,502	1,583	885	137	5,006	4,095				
Medicine Hat	48,274 71	60,760 68	1,899 20	245 43	111,180 02	1,569		365	18	1,369	6				
Taber	1,635 34	1,877 70		128 01	3,641 05	287		72		105					
Total	49,910 05	62,638 38	1,899 20	373 44	114,821 07	1,856		437	18	1,474	6				
Alberta, Totals	**4,203,993 74**	**2,447,100 77**	**652,506 31**	**8,212 23**	**7,311,813 05**	**55,817**	**1,583**	**9,363**	**1,984**	**36,834**	**4,787**				

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

BRITISH COLUMBIA

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Abbotsford	39,455 57	24,783 71		871 30	65,110 58	435	4,791	260		1,459	6,393				
Aldergrove	2,117 52	473 99		1,182 35	3,773 86	300	116								
Huntingdon	20,157 50	1,246 66			21,404 16	600	280			97	215				
Total	61,730 59	26,504 36		2,053 65	90,288 60	1,335	5,187	260		1,556	6,608				
Cranbrook	49,585 07	55,448 21	9,923 00	451 60	115,407 88	1,601		336	103	1,747	18				
Kingsgate	16,535 10	5,710 91			22,246 01	623	3,423	11		1,999	13,984				
Rykerts	1,679 77	545 13		2,605 10	4,830 00	134	94								
Athalmer	177 82	33 66			211 48	12									
Creston	209 98	39 37			249 35	15									
Total	68,187 74	61,777 28	9,923 00	3,056 70	142,944 72	2,385	3,517	347	103	3,746	14,002				
Fernie	127,191 50	45,785 94	10,268 00	737 95	183,983 39	1,339		264	19	824	156				
Michel	1,071 15	332 60			1,403 75	86		4		90	5				
Newgate	8,250 19	1,688 10			9,938 29	172	502	11		488	357				
Flathead	3,276 92	544 32			3,821 24	226									
Roosville	583 46	91 70			675 16	32	669								
Total	140,373 22	48,442 66	10,268 00	737 95	199,821 83	1,855	1,171	279	19	1,402	518				
Grand Forks	92,747 63	13,976 97		169 87	106,894 47	723		110							
Bridesville	683 59	161 26		3 60	848 45	108	12			919	615				
Carson	329 89	24 77			354 66	50	63			1,142	3,422				
Cascade City	668 56	175 62		9 60	853 78	91	66			1,827	2,049				
Midway	1,075 83	376 49		3 60	1,455 92	105	74	11		123	68				
Myncaster	401 98	189 94			591 92	91				318	326				
Total	95,907 48	14,905 05		186 67	110,999 20	1,168	215	121		4,329	6,480				
Nanaimo	27,310 88	23,366 37	1,336 50	696 68	52,710 43	1,041	249	383	151	469	24	336	394	2,569	2,538
Chemainus	2,399 58	11,632 93		81 80	14,114 31	220	278	37		76	4	266	339	387	372
Cumberland	883 81	3,387 54			4,271 35	137		86		82					
Duncan's Station	5,348 69	10,505 06			15,853 75	464		177		218	5				
Ladysmith	2,500 65	1,060 83		358 80	3,920 28	163	168	62		108	4	276	296	2,061	2,067
Port Alberni	12,150 38	20,277 50		69 20	32,497 08	243	51	171		182	6	92	69	375	379
Union Bay	1,746 61	4,922 36		114 60	6,783 57	146	104	100		107	2	100	99	779	778
Alberni	191 36	41 30			232 66	16									
Comox	191 73	36 72			228 45	12									
Courtnay	573 46	119 05			692 51	36									
Kildonan	870 07	4 47		329 20	1,203 74	61	569					562	592	560	539
Total	54,167 22	75,354 13	1,336 50	1,650 28	132,508 13	2,539	1,419	1,016	151	1,242	45	1,632	1,789	6,731	6,673

Nelson	77,142 26	74,506 60	14,607 00	6,189 22	172,445 08	1,752	67	563	54	1,684	89			1,570	1,570
Kaslo	11,223 58	2,235 58			13,459 16	175		28		172	2			469	468
Waneta	5,266 67	1,257 49			6,524 16	281	782	9		1,293	1,612				
Melway	2,850 69	746 01			3,596 70	72	140								
Total	96,483 20	78,745 68	14,607 00	6,189 22	196,025 10	2,280	989	600	54	3,149	1,703			2,039	2,038
New Westminster	301,691 09	357,054 16	843,577 42	4,293 36	1,506 616 03	3,911	1,051	1,485	1,392	3,034	216	172	175	1,514	1,612
Ladner	249 94	1,526 18			1,776 12	47	1	36		2		3	2	121	128
Steveston	917 47	72 30		31 20	1,020 97	70	52			19		86	61	515	559
White Rock	36,535 47	13,281 22		1,162 80	50,979 49	1,213	14,529	49		2,329	8,260	25	18	75	88
Boundary Bay	656 24	81 72			737 96	39	57								
Chilliwack	957 70	194 86			1,152 56	56									
Douglas	5,858 36	893 97		331 95	7,084 28	406	385								
Pacific Highway	17,365 27	2,121 54		488 58	19,975 39	843	477								
Total	364,231 54	375,225 95	843,577 42	6,307 89	1,589,342 80	6,585	16,552	1,570	1,392	5,384	8,476	286	256	2,225	2,387
Penticton	8,930 01	8,990 60		4 00	17,924 61	433		234		331	15				
Kelowna	12,292 53	19,102 26			31,394 79	430		274		436	9				
Osoyoos	4,278 19	1,383 29			5,661 48	311	166				1			16	16
Princeton	16,550 08	12,630 60	3,410 00	2 90	32,593 58	346		105	17	346	8				
Similkameen	1,957 81	390 23			2,348 04	223	126			1,315	420				
Summerland	253 54	49 33			302 87	15									
Total	44,262 16	42,546 31	3,410 00	6 90	90,225 37	1,758	292	613	17	2,428	453			16	16
Prince Rupert	95,245 07	40,784 65		4,210 81	140,240 53	1,845	68	542		277	1,546	2,209	2,178	1,858	1,980
Anyox	34,445 82	2,561 46		48 00	37,055 28	528	61	11		258	139	9	88	514	434
Butedale	163 63	46 70		350 00	560 33	23		5				121	120	1,009	1,015
Ocean Falls	33,968 35	17,585 55		208 40	51,762 30	491	366	39		48	5	5	74	1,020	961
Prince George	10,276 10	27,693 42			37,969 52	256		406		261	5				
Stickeen	2,361 75	522 39		6 00	2,890 14	172	73			469	49	42	43		
Stewart	12,432 20	2,704 77		551 40	15,688 37	366	201	16		450	1,553	69	23	182	229
Arrandale	23 13	19 51			42 64	10		4				24	60	200	165
Bella Coola	66 70	21 36			88 06	13		3							
Hazelton	89 15	15 54			104 69	13									
Masset	785 08	103 03		150 00	1,038 11	18	4	12				26	25	162	162
Silver Heights	861 77	1,359 57		369 60	2,590 94	186	16	16		3,972	345				
Smithers	575 76	115 99			691 75	32									
Telegraph Creek	156 83	25 32			182 15	4									
Total	191,451 34	93,559 26		5,894 21	290,904 81	3,957	789	1,054		5,735	3,642	2,505	2,611	4,945	4,946
Revelstoke	8,112 41	16,242 12	3,290 00	100 00	27,744 53	288		367	21	252	7				
Ashcroft	3,083 11	3,603 56		200 00	6,886 67	115		73		100	14				
Golden	3,253 43	14,109 41		5 00	17,367 84	102		133		52	1				
Kamloops	14,355 28	11,749 98	100 00		26,205 26	755		364	2	572	14				
Merritt	948 86	3,309 93	1,060 00		5,318 79	104		96	20	58	2				
Vernon	14,273 66	12,136 66			26,410 32	503		307		484	7				
Armstrong	274 89	49 51			324 40	15									
Enderley	201 80	43 45			245 25	12									
Quesnel	382 89	68 53			451 42	17									
Williams Lake	834 89	157 54			992 43	30									
Total	45,721 22	61,470 69	4,450 00	305 00	111,946 91	1,941		1,340	43	1,518	45				

No. 9—Statement of Customs-Excise Revenue and other Services, etc.—*Continued*

BRITISH COLUMBIA—Concluded

Ports, Outports and Preventive Stations	Import Duties	Excise Taxes	Excise Duties	Sundry collections	Total Revenue	Import Entries	Export Entries	Excise Tax Entries	Excise Duty Entries	Railway Reports		Sea-Going Vessels		Coasting and Inland Vessels	
										Inwards	Outwards	Arrived	Departed	Arrived	Departed
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Rossland	3,972 38	2,559 90			6,532 28	265		84		304	9				
Paterson	4,494 22	1,700 87			6,195 09	90	14			1	11				
Trail	76,097 17	24,430 59	50 00		100,577 76	1,924		159	1	4,814	24				
Total	84,563 77	28,691 36	50 00		113,305 13	2,279	14	243	1	5,119	44				
Vancouver	12,943,718 01	3,635,682 32	853,085 11	32,266 13	17,464,751 57	132,874	26,147	10,674	2,640	19,102	27,449	2,356	2,300	14,015	14,274
Alert Bay	2,968 30	762 17		218 90	3,949 37		44					70	89	1,288	1,290
Britannia Beach	29,207 49	3,094 34		79 20	32,381 03		85					106	101	582	582
Powell River	74,235 52	32,895 96		208 20	107,339 68		351					194	285	1,874	1,792
Lillooet	106 88	18 02			124 90										
Total	13,050,236 20	3,672,452 81	853,085 11	32,772 43	17,608,546 55	132,874	26,627	10,674	2,640	19,102	27.449	2,726	2,775	17,759	17,938
Victoria	1,964,372 51	692,422 71	195,102 25	33,128 42	2,885,025 89	19,555	3,308	2,373	384	2,458	2,423	1,893	1,721	3,005	3,202
Quatsino	41,730 23	1,544 23		398 30	43,672 76	97	47	25				30	11	166	181
Sidney	9,076 13	4,820 62		352 10	14,248 85	227	63	78				522	508	260	275
Bamfield	564 24	152 90		105 60	822 74	63	54	10				133	145	548	543
Cachalot							3					3	3		
Ganges	416 33	84 28			500 61	25									
Nootka							18					16	18	2	
Port Alice	208 20	42 15			250 35	14									
Port Renfrew	20 89	4 86		69 60	95 35	16	21					69	72	421	418
Tofino	68 22	193 77		43 20	305 19	13	12	24				11	12	319	306
Sidney Inlet							3					2	3	1	
Ucluelet	370 75	83 30		26 40	480 45	68	37	7				60	78	269	258
Total	2,016,827 50	699,348 82	195,102 25	34,123 62	2,945,402 19	20,078	3,566	2,517	384	2,458	2,423	2,739	2,571	4,991	5,183
British Columbia, Totals	**16,314,143 18**	**5,279,024 36**	**1,935,899 28**	**93,284 52**	**23,622,261 34**	**181,034**	**60,338**	**20,634**	**4,804**	**57,168**	**71,888**	**9,888**	**10,002**	**38,706**	**39,181**

YUKON

Dawson	38,292 84	6,465 47	1,608 75	523 75	46,890 81	437	37	48	11	226	82	12	16	66	62
Forty Mile	23 01	4 92			27 93	13	32			618				1	1
Rampart House	1,334 88	191 99			1,526 87	43	17								
Total	39,650 73	6,662 38	1,608 75	523 75	48,445 61	493	86	48	11	844	82	12	16	67	63

White Horse	36,800 98	6,839 69		527 80	44,168 47	755		28		3,612	193			79	77
Carcross	4,749 04	787 46			5,536 50	255				1,626	116			89	89
White Pass	651 27	94 82			746 09	150	387			342					
Atlin	416 15	61 48			477 63	16								51	51
Mayo Landing	283 50	53 15			336 65	17									
Total	42,900 94	7,836 60		527 80	51,265 34	1,193	387	28		5,580	309			219	217
Yukon Totals	**82,551 67**	**14,498 98**	**1,608 75**	**1,051 55**	**99,710 95**	**1,686**	**473**	**76**	**11**	**6,424**	**391**	**12**	**16**	**286**	**280**
British Post Office Parcels	8,447 46	1,762 72			10,210 18										
Preventive Service				675,690 18	675,690 18										
Department of Customs and Excise	8 75	174,956 98		2,253 18	177,218 91										

RECAPITULATION BY PROVINCES

Nova Scotia	**3,514,903 81**	**1,368,469 30**	**37,298 22**	**42,661 52**	**4,963,332 85**	**53,677**	**59,467**	**10,200**	**570**	**33,681**	**18,327**	**4,697**	**5,047**	**21,370**	**21,167**
Prince Edward Island	**186,619 58**	**74,823 80**	**38,558 96**	**922 46**	**300,924 80**	**4,436**	**593**	**1,745**	**468**	**3,925**	**81**	**82**	**105**	**1,567**	**1,542**
New Brunswick	**4,004,245 19**	**1,087,511 23**	**250,108 02**	**45,581 97**	**5,387,446 41**	**38,941**	**71,787**	**8,405**	**955**	**59,391**	**65,049**	**4,955**	**4,366**	**4,321**	**4,546**
Quebec	**44,528,477 87**	**31,343,566 69**	**38,617,252 40**	**197,945 12**	**114,687,242 08**	**439,209**	**258,094**	**57,609**	**27,465**	**307,070**	**293,740**	**4,191**	**3,873**	**54,343**	**49,515**
Ontario	**85,960,295 36**	**44,179,726 73**	**15,142,798 91**	**273,709 58**	**145,556,530 58**	**869,481**	**485,547**	**111,352**	**39,742**	**1,262,964**	**1,366,260**	**1**	**1**	**50,105**	**49,214**
Manitoba	**9,437,559 55**	**4,199,565 24**	**819,200 30**	**23,652 97**	**14,479,978 06**	**115,088**	**32,110**	**7,785**	**4,099**	**82,718**	**77,790**	**2**	**2**	**16**	**14**
Saskatchewan	**3,627,712 60**	**1,491,078 16**	**566,944 22**	**24,568 28**	**5,710,303 26**	**46,000**	**14,827**	**5,193**	**742**	**47,234**	**27,049**				
Alberta	**4,203,993 74**	**2,447,100 77**	**652,506 31**	**8,212 23**	**7,311,813 05**	**55,817**	**1,583**	**9,363**	**1,984**	**36,834**	**4,787**				
British Columbia	**16,314,143 18**	**5,279,024 36**	**1,935,809 28**	**93,284 52**	**23,622,261 34**	**181,034**	**60,338**	**20,634**	**4,804**	**57,168**	**71,888**	**9,888**	**10,002**	**38,706**	**39,181**
Yukon Territory	**82,551 67**	**14,498 98**	**1,608 75**	**1,051 55**	**99,710 95**	**1,686**	**473**	**76**	**11**	**6,424**	**391**	**12**	**16**	**286**	**280**
British Post Office Parcels	**8,447 46**	**1,762 72**			**10,210 18**										
Preventive Service				**675,690 18**	**675,690 18**										
Department of Customs and Excise	**8 75**	**174,956 98**		**2,253 18**	**177,218 91**										
Grand Total	**171,868,958 76**	**91,662,084 96**	**58,062,085 37**	**1,389,533 56**	**322,982,662 65**	**1,796,369**	**984,819**	**232,362**	**71,840**	**1,888,409**	**1,925,362**	**23,828**	**23,412**	**170,714**	**165,459**

No. 10—STATEMENT showing the Total Value of Imports entered for Home Consumption and Exports of the Dominion of Canada, from and to each Country, during the twelve months ended March 31, 1928

Countries	Imports entered for Home Consumption			Exports		
	Dutiable Goods	Free Goods	Total Dutiable and Free	Goods the Produce of Canada	Goods not the Produce of Canada	Total Exports
BRITISH EMPIRE	$	$	$	$	$	$
United Kingdom	150,053,603	35,842,254	185,895,857	410,691,392	2,071,961	412,763,353
Aden	14,546	.....	14,546	31,056	.....	31,056
Australia	3,305,236	1,996,382	5,301 618	14,189,446	3,583	14,193 029
Barbados	4,111 752	2,104,052	6,215,804	1,836,952	48,716	1,885,668
Bermuda	20,433	33,209	53,642	1,364,952	33,254	1,398,206
British East Africa	1,161,281	61,832	1,223,113	1,223,232	.....	1,223,232
" South Africa	97,004	307,360	404,364	8,724,969	604	8,725,573
" West Africa, other	72,875	8,813	81,688	14,518	.....	14,518
" Guiana	6,057,475	14,697	6,072,172	2,284,744	61,927	2,346,671
" Honduras	2,702	155,223	157,925	604,613	16,633	621,246
" India	8,149,493	1,090,286	9,239,779	11,042,851	287	11,043,138
" East Indies, other	5,126	1,024	6,150	4,428	.....	4,428
" West Indies, other	3,023,769	529,230	3,552,999	3,861,847	40,447	3,902,294
" Oceania, other	.....	.....	.....	49,319	.....	49,319
" Straits Settlements	470,299	1,988,746	2,459,045	1,540,530	.....	1,540,530
" Sudan	.....	6,844	6,844	118,449	.....	118,449
Ceylon	2,482,720	248,811	2,731,531	727,369	452	727,821
Fiji Islands	4,315,445	2,431	4,317,876	297,545	1,283	298,828
Gambia	.....	.....	.....	9,254	.....	9,254
Gibraltar	683	.....	683	23,958	.....	23,958
Gold Coast	435,508	1,388,414	1,823,922	464,641	.....	464,641
Hong Kong	1,102,399	338,498	1,440,897	2,465,946	20,707	2,486,653
Iraq	66,738	.....	66,738	289,938	.....	289,938
Irish Free State	24,778	4,833	29,611	4,325,251	.....	4,325,251
Jamaica	3,516,367	1,964,941	5,481,308	4,951,196	107,746	5,058,942
Malta	738	137	875	349,881	.....	349,881
Newfoundland	93,450	2,004,075	2,097,525	11,661,248	450,107	12,111,355
New Zealand	4,972,485	3,289,837	8,262,322	11,366,500	18,386	11,384,886
Nigeria	.....	33,703	33,703	331,806	.....	331,806
Palestine	4,315	11,275	15,590	104,408	.....	104,408
Sierra Leone	.....	.....	.....	72,855	.....	72,855
Trinidad and Tobago	1,661,252	437,949	2,099,201	4,240,751	49,694	4,290,445
Total British Empire	**195,222,472**	**53,864,856**	**249,087,328**	**499,265,845**	**2,925,787**	**502,191,632**
OTHER COUNTRIES						
Abyssinia	40,784	.....	40,784	1,305	.....	1,305
Alaska	54,260	117,302	171,562	311,434	59,344	370,778
Albania	.....	.....	.....	613	.....	613
Argentina	2,011,583	7,838,171	9,849,754	11,085,728	6,526	11,092,254
Armenia	10	.....	10	.....	.....	.....
Austria	573,047	21,828	594,875	291,824	2,659	294,483
Azores and Madeira	129,520	823	130,343	210,004	.....	210,004
Belgian Kongo	.....	.....	.....	110,594	.....	110,594
Belgium	7,014,841	2,883,396	9,898,237	20,781,857	124,352	20,906,209
Bolivia	.....	1,968	1,968	117,954	264	118,218
Brazil	1,881,890	206,310	2,088,200	4,897,082	277	4,897,359
Bulgaria	10,751	.....	10,751	48,636	.....	48,636
Canary Islands	1,964	.....	1,964	131,058	.....	131,058
Chile	89	522,508	522,597	1,347,528	.....	1,347,528
China	1,984,420	588,033	2,572,453	13,432,396	4,206	13,436,602
Colombia	768,437	6,811,939	7,580,376	1,732,573	8,583	1,741,156
Costa Rica	42,104	5,254	47,358	203,050	2,958	206,008
Cuba	4,598,945	988,226	5,587,171	5,386,679	2,108	5,388,787
Czecho-Slovakia	2,391,373	32,611	2,423,984	1,439,483	3,009	1,442,492
Denmark	86,888	39,395	126,283	6,390,662	2,191	6,392,853
Dutch Guiana	.....	13,409	13,409	116,414	203	116,617
" East Indies	542,663	588,620	1,131,283	2,364,334	4,867	2,369,201
" West Indies	74,962	420,116	495,078	163,249	1,989	165,238
Ecuador	.....	618,001	618,001	124,570	146	124,716
Egypt	120,157	39,056	159,213	1,798,004	30	1,798,034
Esthonia	122	66	188	174,181	.....	174,181
Finland	32,729	60,377	93,106	1,838,447	30	1,838,477
France	24,921,806	1,551,926	26,473,732	9,946,145	91,687	10,037,832

No. 10—STATEMENT showing the Total Value of Imports entered for Home Consumption and Exports of the Dominion of Canada, from and to each Country, etc.—*Concluded*

Countries	Imports entered for Home Consumption			Exports		
	Dutiable Goods	Free Goods	Total Dutiable and Free	Goods the Produce of Canada	Goods not the Produce of Canada	Total Exports
OTHER COUNTRIES—Con.	$	$	$	$	$	$
French Africa	52,557	89,774	142,331	456,912	220	457,132
" Guiana	.....	.....	.....	92,158	.....	92,158
" East Indies	.....	61,340	61,340	4,891	.....	4,891
" West Indies	.....	.....	.....	371,511	.....	371,511
" Oceania	.....	.....	.....	9,413	.....	9,413
Germany	13,018,133	4,037,665	17,055,798	42,244,217	81,128	42,325,345
Greece	238,585	15,549	254,134	4,282,227	9,645	4,291,872
Guatemala	93,390	.....	93,390	175,917	204	176,121
Hawaii	303,866	5,887	309,753	79,369	210	79,579
Hayti	198,173	33	198,206	364,770	.....	364,770
Honduras	604,287	18,012	622,299	110,832	1,143	111,975
Hungary	65,018	1,921	66,939	98,374	.....	98,374
Iceland	1,486	90	1,576	36,753	.....	36,753
Italy	3,360,745	881,057	4,241,802	18,742,516	2,902	18,745,418
Italian Africa	.....	.....	.....	179	.....	179
Japan	10,453,459	2,051,914	12,505,373	32,968,243	16,547	32,984,790
Jugo Slavia	10,274	1,767	12,041	137,955	.....	137,955
Korea	2,101	.....	2,101	487,360	250	487,610
Lettonia	3,820	37,223	41,043	125,322	.....	125,322
Liberia	.....	.....	.....	38,363	.....	38,363
Lithuania	.....	4,854	4,854	2,840	.....	2,840
Madagascar	.....	62,671	62,671	6,789	.....	6,789
Mexico	424,901	749,186	1,174,087	2,539,947	21,513	2,561,460
Miquelon and St. Pierre	41,754	35,806	77,560	1,476,340	24,237	1,500,577
Morocco	13,442	1,286	14,728	277,783	.....	277,783
Netherlands	5,019,172	3,774,877	8,794,049	35,537,951	143,273	35,681,224
Nicaragua	1,668	893	2,561	72,733	.....	72,733
Norway	901,445	162,770	1,064,215	6,665,770	3,526	6,669,296
Panama	3,230	.....	3,230	1,124,817	1,552	1,126,369
Paraguay	.....	130,406	130,406	80,756	.....	80,756
Persia	99,112	25,315	124,427	72,896	.....	72,896
Peru	919,057	4,297,345	5,216,402	1,285,525	8,049	1,293,574
Philippines	937	158,942	159,879	272,751	414	273,165
Poland	113,725	21,727	135,452	455,975	.....	455,975
Porto Rico	365	1,125	1,490	815,388	12	815,400
Portugal	559,032	163,247	722,279	942,210	.....	942,210
Portuguese Africa	.....	.....	.....	1,054,816	.....	1,054,816
" Asia	.....	.....	.....	236	.....	236
Roumania	45,750	1,197	46,947	795,953	.....	795,953
Russia	11,422	61,697	73,119	2,424,071	2,380	2,426,451
Salvador	23,007	37	23,044	97,232	.....	97,232
San Domingo	2,452,627	214	2,452,841	413,034	24	413,058
Siam	9,500	32,879	42,379	117,227	.....	117,227
Spain	2,243,604	328,546	2,572,150	609,653	6,315	615,968
Spanish Africa	.....	.....	.....	50,921	.....	50,921
Sweden	1,423,693	438,427	1,862,120	4,612,342	20,304	4,632,646
Switzerland	8,034,395	561,282	8,595,677	498,270	22,629	520,899
Syria	14,831	331	15,162	158,742	.....	158,742
Tripoli	.....	.....	.....	150	.....	150
Turkey	519,675	6,646	526,321	62,640	.....	62,640
United States	416,047,644	303,388,593	719,436,237	478,003,646	18,640,873	496,644,519
Uruguay	8,108	72,399	80,507	1,628,209	.....	1,628,209
Venezuela	206,421	7,117	213,538	1,497,544	125	1,497,669
Virgin Islands of U.S.A.	.....	.....	.....	13,518	.....	13,518
Total Other Countries	**514,827,756**	**345,041,382**	**859,869,138**	**728,941,761**	**19,322,904**	**748,264,665**
Total Merchandise	**710,050,228**	**398,906,238**	**1,108,956,466**	**1,228,207,606**	**22,248,691**	**1,250,456,297**

No. 11—Comparative Statement of Goods remaining in Warehouse in 1926, 1927 and 1928

Articles		Remaining in Warehouse, March 31, 1926		Remaining in Warehouse, March 31, 1927		Remaining in Warehouse, March 31, 1928	
		Quantity	Value	Quantity	Value	Quantity	Value
Agricultural and vegetable products, mainly foods—							
Grain and products	$	.....	99,548	.....	75,482	.....	147,120
Fruits and nuts	$	.....	725,065	.....	932,213	.....	880,631
Sugar above No. 16 D.S.	Lb.	7,734,356	187,952	4,869,449	120,282	8,694,470	216,101
Sugar not above No. 16 D.S.	Lb.	59,975,437	6,085,881	69,575,855	7,242,531	56,126,740	6,513,735
Molasses	Gal.	201,999	20,904	666,891	59,287	172,517	19,685
Tea	Lb.	12,561,931	4,226,091	19,597,450	920,166	16,419,066	4,961,011
Coffee	Lb.	3,420,646	1,352,276	3,431,560	1,365,974	5,792,896	1,474,601
Other vegetable food products	$	—.....	754,154	.....	415,336	.....	365,539
Agricultural and vegetable products, other than foods—							
Brandy	Gal.	103,305	778,295	132,155	893,318	163,654	1,326,983
Gin	Gal.	131,937	1,869,299	128,347	2,085,559	183,429	3,087,675
Rum	Gal.	73,077	534,806	48,941	396,748	69,525	762,537
Whiskey	Gal.	448,826	8,451,416	417,642	7,859,846	835,116	16,635,553
Wines	Gal.	281,968	984,508	336,661	1,156,074	518,349	1,845,627
Other Spirits	Gal.	135,775	481,992	108,304	290,028	139,967	487,623
Tobacco, unmanufactured	$	.....	1,946,850	.....	1,187,262	.....	1,693,807
Tobacco, manufactures of	$	.....	50,799	.....	72,293	.....	84,208
Vegetable products, n.o.p.	$	.....	134,241	.....	145,424	.....	162,349
Animals and animal products—							
Fish	$	.....	301,184	.....	410,980	.....	258,633
Leather	$	.....	124,488	.....	106,318	.....	80,460
Other animal products	$	.....	377,347	.....	353,161	.....	362,885
Fibres, textiles and textile products—							
Cotton	$	.....	846,715	.....	911,042	.....	915,132
Flax	$	.....	254,183	.....	179,148	.....	89,288
Silk	$	.....	590,417	.....	814,054	.....	979,885
Wool	$	.....	1,255,930	.....	818,700	.....	1,350,254
Other fibres and textile products	$	.....	309,368	.....	339,005	.....	451,383
Wood and paper products—							
Wood	$	.....	313,227	.....	273,104	.....	262,695
Paper	$	.....	488,207	.....	513,327	.....	413,205
Iron and steel and manufactures—							
Automobiles	No.	503	530,604	283	336,213	577	656,462
Other iron and steel manufactures	$	.....	1,642,552	.....	1,766,584	.....	1,621,450
Other ores, metals and metal manufactures	$	.....	425,156	.....	420,827	.....	550,660
Non-metallic minerals and products—							
Coal	Tons	899,848	1,586,071	1,867,981	3,531,353	1,704,874	3,032,470
Glass	$	.....	61,552	.....	78,786	.....	93,734
Oil	$	.....	710,448	.....	762,578	.....	526,986
Other non-metallic minerals and products	$	.....	87,148	.....	72,233	.....	107,160
Chemicals and chemical products	$	.....	1,111,119	.....	462,473	.....	895,897
Miscellaneous commodities	$	.....	883,406	.....	1,002,979	.....	1,028,606
Total		.....	**40,583,199**	.....	**38,370,688**	.....	**54,342,030**

No. 12—Abstract by Countries, of Imports entered for Consumption Dutiable and Free

Countries	Entered for Home Consumption									
	General Tariff		Preferential Tariff		Treaty Rates		Total Dutiable	Total Free	Grand Total	
	Value	Duty	Value	Duty	Value	Duty	Value	Value	Value	Duty
	$	$	$	$	$	$	$	$	$	$
British Empire										
United Kingdom	41,270,232	17,845,101 90	107,102,956	20,135,178 05	1,680,415	397,242 24	150,053,603	35,842,254	185,895,857	38,377,522 19
Aden	14,546	1,755 96	.....	.....	.....	.....	14,546	.....	14,546	1,755 96
Australia	74,868	18,397 74	3,193,820	211,818 21	36,548	8,863 73	3,305,236	1,996,382	5,301,618	239,079 68
Barbados	32,271	11,160 00	4,079,481	363,714 73	.....	.....	4,111,752	2,104,052	6,215,804	374,874 73
Bermuda	11,452	3,408 91	8,981	1,356 71	.....	.....	20,433	33,209	53,642	4,765 62
British East Africa	12,312	1,563 98	1,148,823	97,946 77	146	16 10	1,161,281	61,832	1,223,113	99,526 85
" South Africa	2,370	857 01	94,557	6,388 59	77	20 79	97,004	307,360	404,364	7,266 39
" West Africa, other	.....	.....	.....	.....	72,875	6,600 00	72,875	8,813	81,688	6,600 00
" Guiana	29,740	13,492 09	6,027 735	620,048 03	.....	.....	6,057,475	14,697	6,072,172	633,540 12
" Honduras	2,702	849 00	.....	.....	.....	.....	2,702	155,223	157,925	849 00
" India	293,669	38,428 85	7,855,165	1,091,725 58	659	178 39	8,149,493	1,090,286	9,239,779	1,130,332 82
" East Indies, other	5,126	1,068 48	.....	.....	.....	.....	5,126	1,024	6,150	1,068 48
" West Indies, other	66,806	12,995 86	2,956,955	232,273 58	8	1 44	3,023,769	529,230	3,552,999	245,270 88
" Straits Settlements	48,668	10,416 88	417,418	44,457 82	4,213	737 34	470,299	1,988,746	2,459,045	55,612 04
" Sudan	.....	.....	.....	.....	.....	.....	.....	6,844	6,844	.....
Ceylon	21,102	5,918 84	2,461,618	527,832 70	.....	.....	2,482,720	248,811	2,731,531	533,751 54
Fiji Islands	3,897	825 05	4,311,548	385,275 45	.....	.....	4,315,445	2,431	4,317,876	386,100 50
Gibraltar	600	212 02	.....	.....	83	12 16	683	.....	683	224 18
Gold Coast	83,220	11,200 00	247	37 05	352,041	38,410 50	435,508	1,388,414	1,823,922	49,647 55
Hong Kong	1,053,837	315,405 81	.....	.....	48,562	13,158 25	1,102,399	338,498	1,440,897	328,564 06
Iraq	65,604	23,105 40	.....	.....	1,134	135 89	66,738	.....	66,738	23,241 29
Irish Free State	1,451	968 88	21,307	4,692 30	2,020	212 98	24,778	4,833	29,611	5,874 16
Jamaica	14,089	6,574 33	3,502,127	545,207 16	151	39 10	3,516,367	1,964,941	5,481,308	551,820 59
Malta	153	59 35	.....	.....	585	160 93	738	137	875	220 28
Newfoundland	93,160	26,068 10	.....	.....	290	70 84	93,450	2,004,075	2,097,525	26,138 94
New Zealand	124,184	15,744 82	4,847,901	146,702 86	400	72 00	4,972,485	3,289,837	8,262,322	162,519 68
Nigeria	.....	.....	.....	.....	.....	.....	.....	33,703	33,703	.....
Palestine	4,252	4,205 61	.....	.....	63	12 76	4,315	11,275	15,590	4,218 37
Trinidad and Tobago	61,347	11,059 12	1,563,465	122,956 49	36,440	3,765 00	1,661,252	437,949	2,099,201	137,780 61
Total British Empire	**43,391,658**	**18,389,843 99**	**149,594,104**	**24,537,612 08**	**2,236,710**	**469,710 44**	**195,222,472**	**53,864,856**	**249,087,328**	**43,388,166 51**

No. 12—Abstract by Countries, of Imports entered for Consumption Dutiable and Free—*Concluded*

Countries	Entered for Home Consumption									
	General Tariff		Preferential Tariff		Treaty Rates		Total Dutiable	Total Free	Grand Total	
	Value	Duty	Value	Duty	Value	Duty	Value	Value	Value	Duty
	$	$	$	$	$	$	$	$	$	$
Other Countries										
Abyssinia	40,784	5,763 30					40,784		40,784	5,763 30
Alaska	54,260	6,492 86					54,260	117,302	171,562	6,492 86
Armenia	10	1 00					10		10	1 00
Argentina	1,895,636	212,178 38			115,947	23,189 40	2,011,583	7,838,171	9,849,754	235,367 78
Austria	573,047	173,088 64					573,047	21,828	594,875	173,088 64
Azores and Madeira	129,520	39,533 75					129,520	823	130,343	39,533 75
Belgium	1,901,655	439,251 62			5,113,186	993,511 54	7,014,841	2,883,396	9,898,237	1,432,763 16
Bolivia								1,968	1,968	
Brazil	1,881,890	324,920 83					1,881,890	206,310	2,088,200	324,920 83
Bulgaria	10,751	993 28					10,751		10,751	993 28
Canary Islands	9	1 80			1,955	548 03	1,964		1,964	549 83
Chile	89	90 00					89	522,508	522,597	90 00
China	1,984 420	689,679 32					1,984,420	588,033	2,572,453	689,679 32
Colombia	768,437	90,432 13					768,437	6,811,939	7,580,376	90,432 13
Costa Rica	42,104	4,241 49					42,104	5,254	47,358	4,241 49
Cuba	4,598,825	2,204,503 46			120	36 00	4,598,945	988,226	5,587,171	2,204,539 46
Czecho-Slovakia	1,200,860	311,723 66			1,190,513	325,099 29	2,391,373	32,611	2,423,984	636,822 95
Denmark	35,426	7,402 76			51,462	9,126 07	86,888	39,395	126,283	16,528 83
Dutch Guiana								13,409	13,409	
" East Indies	471,623	143,684 21			71,040	24,094 84	542,663	588,620	1,131,283	167,779 05
" West Indies	74,962	6,132 71					74,962	420,116	495,078	6,132 71
Ecuador								618,001	618,001	
Egypt	120,157	38,982 95					120,157	39,056	159,213	38,982 95
Esthonia	122	36 60					122	66	188	36 60
Finland	22,046	5,757 56			10,683	2,233 55	32,729	60,377	93,106	7,991 11
France	1,267,966	742,880 37			23,653,840	8,392,253 22	24,921,806	1,551,926	26,473,732	9,135,133 59
French Africa	4,764	1,289 73			47,793	13,378 08	52,557	89,774	142,331	14,667 81
" East Indies								61,340	61,340	
Germany	13,018,133	3,690,687 07					13,018,133	4,037,665	17,055,798	3,690,687 07
Greece	238,585	96,325 21					238,585	15,549	254,134	96,325 21
Guatemala	93,390	10,366 56					93,390		93,390	10,366 56
Hawaii	303,866	65,447 07					303,866	5,887	309,753	65,447 07
Hayti	198,173	100,529 47					198,173	33	198,206	100,529 47
Honduras	604,287	296,102 90					604,287	18,012	622,299	296,102 90
Hungary	65,018	7,895 46					65,018	1,921	66,939	7,895 46
Iceland	1,144	117 30			342	30 78	1,486	90	1,576	148 08
Italy	641,287	143,602 96			2,719,458	640,142 81	3,360,745	881,057	4,241,802	783,745 77

Japan	1,029,900	444,871 05			9,423,559	2,356,390 57	10,453,459	2,051,914	12,505,373	2,801,261 62
Jugo Slavia	10,274	3,456 00					10,274	1,767	12,041	3,456 00
Korea	1,403	455 55			698	172 65	2,101		2,101	628 20
Lettonia	3,820	1,237 71					3,820	37,223	41,043	1,237 71
Lithuania								4,854	4,854	
Madagascar								62,671	62,671	
Mexico	424,901	82,495 25					424,901	749,186	1,174,087	82,495 25
Miquelon and St. Pierre	41,696	39,714 35			58	10 94	41,754	35,806	77,560	39,725 29
Morocco	13,410	1,448 25			32	8 80	13,442	1,286	14,728	1,457 05
Netherlands	3,116,125	1,191,112 67			1,903,047	370,866 71	5,019,172	3,774,877	8,794,049	1,561,979 38
Nicaragua	1,668	263 49					1,668	893	2,561	263 49
Norway	40,905	8,293 36			860,540	201,075 32	901,445	162,770	1,064,215	209,368 68
Panama	3,230	467 88					3,230		3,230	467 88
Paraguay								130,406	130,406	
Persia	99,112	34,571 33					99,112	25,315	124,427	34,571 33
Peru	919,057	233,358 80					919,057	4,297,345	5,216,402	233,358 80
Philippines	937	304 40					937	158,942	159,879	304 40
Poland	113,725	21,303 21					113,725	21,727	135,452	21,303 21
Porto Rico	365	976 85					365	1,125	1,490	976 85
Portugal	559,032	274,442 34					559,032	163,247	722,279	274,442 34
Roumania	45,750	5,784 03					45,750	1,197	46,947	5,784 03
Russia	11,062	3,303 25			360	97 00	11,422	61,697	73,119	3,400 25
Salvador	23,007	2,645 52					23,007	37	23,044	2,645 52
San Domingo	2,452,627	1,154,867 03					2,452,627	214	2,452,841	1,154,867 03
Siam	9,500	1,680 00					9,500	32,879	42,379	1,680 00
Spain	1,181,679	277,651 83			1,061,925	251,712 41	2,243,604	328,546	2,572,150	529,364 24
Sweden	421,524	70,157 68			1,002,169	221,586 51	1,423,693	438,427	1,862,120	291,744 19
Switzerland	1,543,582	247,430 62			6,490,813	1,775,025 14	8,034,395	561,282	8,595,677	2,022,455 76
Syria	14,779	4,628 40			52	15 48	14,831	331	15,162	4,643 88
Turkey	519,675	131,034 72					519,675	6,646	526,321	131,034 72
United States	416,047,644	97,124,431 08					416,047,644	303,388,593	719,436,237	97,124,431 08
Uruguay	8,108	2,229 70					8,108	72,399	80,507	2,229 70
Venezuela	201,879	27,968 64			4,542	382 50	206,421	7,117	213,538	28,351 14
Total Other Countries	**461,103,622**	**111,252,721 40**			**53,724,134**	**15,600,987 64**	**514,827,756**	**345,041,382**	**859,869,138**	**126,853,709 04**
Duty on articles lower than home trade price		579,800 84								579,800 84
Additional duties		1,051,091 61								1,051,091 61
Grand Total, Merchandise	**504,495,280**	**131,264,457 84**	**149,594,104**	**24,537,612 08**	**55,960,844**	**16,070,698 08**	**710,050,228**	**398,906,238**	**1,108,956,466**	**171,872,768 00**
Goods admitted Free under Preferential tariff only.—										
From United Kingdom			4,655,899							
Other Countries			8,433,548							
Total			**13,089,447**							

No. 13—Abstract of the Total Value of Exports by Countries

Countries	Goods the produce of Canada	Goods not the produce of Canada	Total Exports
	$	$	$
British Empire			
United Kingdom	410,691,392	2,071,961	412,763,353
Aden	31,056	.....	31,056
Australia	14,189,446	3,583	14,193 029
Barbados	1,836,952	48,716	1,885,668
Bermuda	1,364,952	33,254	1,398,206
British East Efrica	1,223,232	.....	1,223,232
" South Africa	8,724,969	604	8,725,573
" West Africa, other	14,518	.....	14,518
" Guiana	2,284,744	61,927	2,346,671
" Honduras	604,613	16,633	621,246
" India	11,042,851	287	11,043,138
" East Indies, other	4,428	.....	4,428
" West Indies, other	3,861,847	40,447	3,902,294
" Oceania, other	49,319	.....	49,319
" Straits Settlements	1,540,530	.....	1,540,530
" Sudan	118,449	.....	118,449
Ceylon	727,369	452	727,821
Fiji Islands	297,545	1,283	298,828
Gambia	9,254	.....	9,254
Gibraltar	23,958	.....	23,958
Gold Coast	464,641	.....	464,641
Hong Kong	2,465,946	20,707	2,486,653
Iraq	289,938	.....	289,938
Irish Free State	4,325,251	.....	4,325,251
Jamaica	4,951,196	107,746	5,058,942
Malta	349,881	.....	349,881
Newfoundland	11,661,248	450,107	12,111,355
New Zealand	11,366,500	18,386	11,384,886
Nigeria	331,806	.....	331,806
Palestine	104,408	.....	104,408
Sierra Leone	72,855	.....	72,855
Trinidad and Tobago	4,240,751	49,694	4,290,445
Total British Empire	**499,265,845**	**2,925,787**	**502,191,632**
Other Countries			
Abyssinia	1,305	.....	1,305
Alaska	311,434	59,344	370,778
Albania	613	.....	613
Argentina	11,085,728	6,526	11,092,254
Austria	291,824	2,659	294,483
Azores and Madeira	210,004	.....	210,004
Belgian Kongo	110,594	.....	110,594
Belgium	20,781,857	124,352	20,906,209
Bolivia	117,954	264	118,218
Brazil	4,897,082	277	4,897,359
Bulgaria	48,636	.....	48,636
Canary Islands	131,058	.....	131,058
Chile	1,347,528	.....	1,347,528
China	13,432,396	4,206	13,436,602
Colombia	1,732,573	8,583	1,741,156
Costa Rica	203,050	2,958	206,008
Cuba	5,386,679	2,108	5,388,787
Czecho-Slovakia	1,439,483	3,009	1,442,492
Denmark	6,390,662	2,191	6,392,853
Dutch Guiana	116,414	203	116,617
" East Indies	2,364,334	4,867	2,369,201
" West Indies	163,249	1,989	165,238
Ecuador	124,570	146	124,716
Egypt	1,798,004	30	1,798,034
Esthonia	174,181	.....	174,181
Finland	1,838,447	30	1,838,477
France	9,946,145	91,687	10,037,832
French Africa	456,912	220	457,132
" Guiana	92,158	.....	92,158
" East Indies	4,891	.....	4,891
" West Indies	371,511	.....	371,511
" Oceania	9,413	.....	9,413

No. 13—ABSTRACT of the Total Value of Exports by Countries—*Concluded*

Countries	Goods the produce of Canada	Goods not the produce of Canada	Total exports
	$	$	$
OTHER COUNTRIES—Con.			
Germany	42,244,217	81,128	42,325,345
Greece	4,282,227	9,645	4,291,872
Guatemala	175,917	204	176,121
Hawaii	79,369	210	79,579
Hayti	364,770	.....	364,770
Honduras	110,832	1,143	111,975
Hungary	98,374	.....	98,374
Iceland	36,753	.....	36,753
Italy	18,742,516	2,902	18,745,418
Italian Africa	179	.....	179
Japan	32,968,243	16,547	32,984,790
Jugo Slavia	137,955	.....	137,955
Korea	487,360	250	487,610
Lettonia	125,322	.....	125,322
Liberia	38,363	.....	38,363
Lithuania	2,840	.....	2,840
Madagascar	6,789	.....	6,789
Mexico	2,539,947	21,513	2,561,460
Miquelon and St. Pierre	1,476,340	24,237	1,500,577
Morocco	277,783	.....	277,783
Netherlands	35,537,951	143,273	35,681,224
Nicaragua	72,733	.....	72,733
Norway	6,665,770	3,526	6,669,296
Panama	1,124,817	1,552	1,126,369
Paraguay	80,756	.....	80,756
Persia	72,896	.....	72,896
Peru	1,285,525	8,049	1,293,574
Philippines	272,751	414	273,165
Poland	455,975	.....	455,975
Porto Rico	815,388	12	815,400
Portugal	942,210	.....	942,210
Portuguese Africa	1,054,816	.....	1,054,816
" Asia	236	.....	236
Roumania	795,953	.....	795,953
Russia	2,424,071	2,380	2,426,451
Salvador	97,232	.....	97,232
San Domingo	413,034	24	413,058
Siam	117,227	.....	117,227
Spain	609,653	6,315	615,968
Spanish Africa	50,921	.....	50,921
Sweden	4,612,342	20,304	4,632,646
Switzerland	498,270	22,629	520,899
Syria	158,742	.....	158,742
Tripoli	150	.....	150
Turkey	62,640	.....	62,640
United States	478,003,646	18,640,873	496,644,519
Uruguay	1,628,209	.....	1,628,209
Venezuela	1,497,544	125	1,497,669
Virgin Islands of U.S.A.	13,518	.....	13,518
Total Other Countries	**728,941,761**	**19,322,904**	**748,264,665**
Grand Total Merchandise, Exports	**1,228,207,606**	**22,248,691**	**1,250,456,297**

PART II—EXCISE

INDEX TO EXCISE TABLES AND STATEMENTS

CONTENTS

No. of Statements	Description	Page
	Report of the Commissioner of Excise	3
1	Per Capita Consumption	7
2	Excise Duty Collections, by Ports	8
3	Comparative Excise Duty Collections, by Provinces	11
4	Comparative Statement of Excise Duty Revenues	12
5	Comparative Statement of Exciseable Articles taken for Consumption	13
6	Sprits:—Comparative Statement of Manufacture	14
7	" —Comparative Transactions in Distilleries	16
8	" —Warehouse Return, by Ports	17
9	" —Comparative Statement of Warehouse Return	20
10	Malt:—Comparative Statement of Manufacture	22
11	" —Comparative Statement of Warehouse Return	23
12	Malt Liquor:—Comparative Statement of Manufacture	24
13	" —Comparative Statement of Warehouse Return	25
14	Tobacco:—Comparative Statement of Manufacture	26
15	" —Warehouse Return, Manufactured before June 1, 1908	28
16	" —Warehouse Return, by Ports	29
17	" —Comparative Statement of Warehouse Return	32
18	" —Foreign Raw Leaf, Comparative Statement of Warehouse Return	36
19	Cigars:—Comparative Statement of Manufacture	38
20	" —Comparative Statement of Warehouse Return	39
21	Inspection of Petroleum	40
22	Number of Licenses by Ports	41
23	Excise Tax Collections, by Ports	44

REPORT

OF THE

COMMISSIONER OF EXCISE

To the Hon. W. D. Euler,
Minister of National Revenue.

Sir,—Herewith I have the honour to submit statements of the Excise Revenues collected by this department during the fiscal year ended March 31, 1928, with statistics respecting the sources whence these revenues were derived. The following summary comparison shows the accrued revenues for the fiscal years ended March 31, 1924, 1925, 1926, 1927 and 1928.

—	1924	1925	1926	1927	1928
	$	$	$	$	$
Excise Duty	38,616,038	39,005,343	43,370,231	49,139,913	58,062,085
Excise Tax	123,668,847	89,330,838	99,228,334	106,723,328	91,662,086
Totals	162,284,885	128,336,181	142,598,565	155,863,241	149,724,171

Details of Excise Revenue accrued during the undermentioned fiscal years:

—	1924	1925	1926	1927	1928
	$	$	$	$	$
Spirits	9,371,063	9,393,661	10,932,578	13,904,584	18,267,537
Malt-Liquor	93,072	107,734	113,933	223,833	239,245
Malt	3,280,057	3,540,621	3,840,774	3,811,557	4,277,066
Tobacco	25,236,296	25,421,602	27,919,051	30,638,418	34,702,359
Cigars	608,685	516,606	539,300	536,845	549,896
Acetic acid	100	100	100	150	150
Manufacturers in bond	18,725	17,675	17,250	17,350	17,700
Other receipts	8,040	7,344	7,245	7,176	8,170
Totals	38,616,038	39,005,343	43,370,231	49,139,913	58,062,123

The quantity of spirits produced during the fiscal year was 11,596,200 proof gallons, as compared with 9,121,051 proof gallons produced in the previous fiscal year. The raw materials taken for use in the production of spirits, during the fiscal year were as follows:—

	Lb.
Malt	25,116,100
Indian corn	78,871,584
Rye	53,617,695
Oats	139,184
Wheat	249,660
Molasses	49,801,495

The transactions of the several distilleries will be found in Statement No. 7.

	Proof gal.
There was, on April 1, 1927, in process of manufacture	859,893
Manufactured during the fiscal year	11,596,200
Returned to distilleries for redistillation—In bond	1,847,567
Received into distilleries from other sources—Duty paid	255,938
Total	14,559,598

This was disposed of as follows:—

	Proof gal.
Placed in warehouse	13,851,317
Fusel oil and spirits written off	19,345
Deficiency arising from rectification	3,818
Remaining in process of manufacture, March 31, 1928, by actual stock taking	685,118
Total	14,559,598

Spirits.—The following statement shows the warehousing transactions in Spirits during the fiscal year ended March 31, 1928, and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year including transits	Warehoused during the year Ex-distillery	Otherwise warehoused	Entered for consumption	Exported	Used in bonded factories	Otherwise accounted for	For redistillation	In Warehouse at end of year, including transits
	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.
1923–1924	8,677,289	5,615,401	164,677	899,291	875,699	1,244,249	1,521,588	1,198,038	8,718,502
1924–1925	8,718,502	8,646,683	41,696	910,316	803,535	1,053,472	1,485,894	1,462,169	11,691,495
1925–1926	11,691,495	7,328,232	119,972	1,082,785	499,007	1,109,295	1,894,957	1,756,259	12,797,396
1926–1927	12,797,396	10,842,001	156,677	1,404,111	571,792	1,170,059	2,438,928	1,810,783	16,400,401
Totals	41,884,682	32,432,317	483,022	4,296,503	2,750,033	4,577,075	7,341,367	6,227,249	49,607,794
Average	10,471,170	8,108,079	120,755	1,074,126	687,508	1,144,269	1,835,342	1,556,812	12,401,948
1927–1928	16,400,401	13,851,317	11,016	1,896,357	579,420	1,069,622	3,101,771	1,847,567	21,767,997

The foreign demand for Canadian distillery products is less than the average of the last four years, the quantities exported being as follows:—

	Proof gal.
1923–1924	875,699
1924–1925	803,535
1925–1926	499,007
1926–1927	571,792
1927–1928	579,420

The following statement shows the entire quantities of spirits upon which duties were collected during the several fiscal years recited therein.

Fiscal Years	Canadian Spirits		Imported Spirits used in Bonded Factories	Total quantities upon which duty was collected	Revenue accrued including License Fees
	Paid duty Ex-distillery	Paid duty Ex-warehouse			
	Pf. gal.	Pf. gal.	Pf. gal.	Pf. gal.	$
1923–1924	638	1,980,977	162,562	2,144,177	9,371,063
1924–1925	3,795	1,923,605	40,183	1,967,583	9,393,661
1925–1926	6,153	2,072,490	119,590	2,198,233	10,932,578
1926–1927	1,585	2,417,759	156,381	2,575,755	13,904,554
Totals	12,171	8,394,831	478,716	8,885,748	43,601,856
Average	3,043	2,098,708	119,679	2,221,437	10,900,464
1927–1928	3,818	2,956,946	9,033	2,969,797	18,267,537

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Malt.—The following statement shows the transactions in Malt during the fiscal year ended March 31, 1928, and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year, including transits	Manufactured during the year	Imported	Increase	Entered for consumption	Exported	Otherwise accounted for	In Warehouse at end of year, including transits	Revenue accrued including License Fees
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	$
1923-24	22,730,480	105,441,150	13,193,777	677,187	109,286,000	8,901,243	7,558,535	16,296,816	3,280,057
1924-25	16,296,816	134,056,684	17,035,532	501,757	118,231,171	5,864,393	9,782,976	34,012,249	3,540,621
1925-26	34,012,249	115,810,397	22,910,071	300,092	127,789,729	4,664,150	10,600,197	29,978,733	3,840,774
1926-27	29,978,733	117,780,954	21,647,932	636,019	126,967,976	6,304,684	18,417,736	18,353,242	3,811,557
Totals	103,018,278	473,089,185	74,787,312	2,115,055	482,274,876	25,734,470	46,359,444	98,641,040	14,473,009
Average	25,754,569	118,272,296	18,696,828	528,764	120,568,719	6,433,617	11,589,861	24,660,260	3,618,252
1927-28	18,353,242	145,835,237	32,686,029	848,140	142,543,947	3,274,082	31,048,607	20,856,012	4,277,066

Tobacco.—The following statement shows the transactions in Tobacco, cigarettes and snuff during the fiscal year ended March 31, 1928 and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year, including transits	Manufactured during the year	Entered for consumption	Exported	Otherwise accounted for	In Warehouse at end of year, including transits	Raw Leaf Entered for consumption	Canada Twist entered for consumption	Total Tobacco entered for consumption	Other Materials entered for consumption	Revenue accrued, including License Fees
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	$
1923-1924	569,030	28,436,454	28,432,365	143,301	10,188	419,630	15,289,166	100	43,721,631	.....	25,236,296
1924-1925	419,630	28,683,812	28,455,565	146,721	62,679	437,476	14,873,162	166	43,328,893	.....	25,421,602
1925-1926	437,476	30,243,894	30,245,627	121,573	47,871	266,299	15,471,377	200	45,717,204	18,472	27,919,037
1926-1927	266,299	31,729,243	31,591,732	209,273	16,162	88,375	15,489,811	40	47,081,583	23,388	30,638,418
Totals	1,692,435	119,093,403	118,725,289	710,868	136,900	1,211,780	61,123,516	506	179,849,311	41,860	109,215,353
Average	423,109	29,773,351	29,681,322	177,716	34,225	302,945	15,280,879	126	44,962,328	10,465	27,303,838
1927-1928	88,375	34,153,685	33,688,815	234,005	18,910	300,330	16,539,478	.....	50,228,293	.....	34,702,359

Cigars.—The following statement shows the transactions in Cigars during the fiscal year ended March 31, 1928, and the four preceding fiscal years:—

Fiscal Years	In Warehouse at beginning of year, including transits	Manufactured during the year	Assessments to bring production up to standard	Entered for Consumption	Exported	Otherwise accounted for	In Warehouse at end of year, including transits	Revenue accrued, including License Fees
	No.	No.	No.	No.	No.	No.	No.	$
1923-1924	16,828,645	193,526,358	1,404,006	198,042,909	166,700	64,705	13,499,295	608,685
1924-1925	13,499,295	(a) 14,600 167,114,719	938,968	167,158,419	107,050	.....	13,348,545	516,606
1925-1926	13,348,545	175,658,048	627,450	174,363,188	100,570	76,900	15,093,385	539,300
1926-1927	15,093,385	175,433,456	55,427	175,335,838	88,500	19,375	15,138,555	536,845
Totals	58,769,870	711,747,181	3,025,851	714,900,354	462,820	160,980	57,079,780	2,201,436
Average	14,692,467	177,936,795	756,463	178,725,088	115,705	40,245	14,269,945	550,359
1927-1928	15,138,555	180,824,419	66,934	181,797,548	107,465	3,750	14,121,145	549,896

(a) Re-warehoused.

Inspection of Petroleum.—The quantity of Petroleum and Naphtha inspected during the fiscal year was as follows:—

	Galls.
Petroleum	80,079,755
Naphtha	319,642,586
Total	399,722,341

GEO. W. TAYLOR,
Commissioner of Excise.

DEPARTMENT OF NATIONAL REVENUE,
OTTAWA, OCTOBER 25th, 1928.

No. 1—TABLE showing the Annual Consumption, per head, of the undermentioned articles, paying Excise and Customs Duties, and Revenue, per head, derived annually.

Years	Dominion of Canada							
	Quantity				Duty			
	Spirits	Beer	Wines	Tobacco	Spirits	Beer	Wines	Tobacco
	Galls.	Galls.	Galls.	Lb.	$	$	$	$
1869	1·124	2·290	·115	1·755	·761	·092	·037	·193
1870	1·434	2·163	·195	2·190	·962	·085	·049	·259
1871	1·578	2·490	·259	2·052	1·059	·095	·056	·336
1872	1·723	2·774	·257	2·481	1·160	·108	·070	·422
1873	1·682	3·188	·238	1·999	1·135	·120	·066	·350
1874	1·994	3·012	·288	2·566	1·363	·119	·086	·442
1875	1·394	3·091	·149	1·995	1·127	·114	·069	·428
1876	1·204	2·454	·177	2·316	1·182	·098	·075	·513
1877	·975	2·322	·096	2·051	·949	·109	·057	·446
1878	·960	2·169	·096	1·976	·927	·147	·052	·439
1879	1·131	2·209	·104	1·954	1·005	·125	·057	·449
1880	·715	2·248	·077	1·036	·772	·081	·055	·428
1881	·922	2·298	·099	2·935	·990	·081	·073	·443
1882	1·009	2·747	·120	2·150	1·084	·098	·092	·485
1883	1·090	2·882	·135	2·280	1·186	·103	·097	·473
1884	·998	2·924	·117	2·476	1·074	·104	·082	·365
1885	1·126	2·639	·109	2·623	1·198	·111	·074	·393
1886	·711	2·839	·110	2·052	1·007	·091	·074	·502
1887	·746	3·084	·095	2·062	1·045	·100	·066	·514
1888	·645	3·247	·094	2·093	·944	·110	·066	·509
1889	·776	3·263	·097	1·153	1·107	·114	·068	·529
1890	·883	3·360	·104	2·143	1·257	·121	·072	·539
1891	·745	3·790	·111	2·292	1·094	·137	·080	·590
1892	·701	3·516	·101	2·291	1·156	·211	·075	·680
1893	·740	3·485	·094	2·314	1·235	·218	·070	·691
1894	·742	3·722	·089	2·264	1·235	·205	·060	·683
1895	·666	3·471	·090	2·163	1·124	·161	·056	·645
1896	·623	3·528	·070	2·120	1·159	·164	·047	·639
1897	·723	3·469	·084	2·243	1·341	·213	·041	·671
1898	·536	3·808	·082	2·358	1·306	·126	·041	·615
1899	·661	3·995	·086	2·174	1·367	·174	·045	·841
1900	·701	4·364	·085	2·300	1·455	·185	·044	·853
1901	·757	4·680	·099	2·375	1·574	·195	·047	·864
1902	·786	5·035	·090	2·371	1·631	·211	·048	·902
1903	·848	4·592	·094	2·483	1·766	·200	·049	·967
1904	·917	4·739	·092	2·664	1·913	·217	·049	1·005
1905	·895	5·123	·093	2·768	1·898	·214	·049	1·036
1906	·898	5·484	·095	2·898	1·879	·238	·052	1·100
*1907 (nine months)	·977	5·765	·095	3·048	2·035	·257	·054	1·317
1908	·939	6·146	·102	3·066	1·965	·268	·057	1·194
1909	·860	5·708	·091	3·105	1·794	·241	·050	1·101
1910	·883	5·713	·105	3·183	1·843	·242	·057	1·059
1911	·948	5·999	·114	3·323	1·988	·257	·059	1·157
1912	1·030	6·598	·114	3·679	2·170	·288	·063	1·336
1913	1·112	7·005	·131	3·818	2·340	·320	·076	1·462
1914	1·061	7·200	·124	3·711	2·249	·328	·069	1·438
1915	·872	6·071	·095	3·427	2·086	·379	·051	1·361
1916	·745	4·950	·062	3·329	1·951	·362	·033	1·454
1917	·698	4·188	·061	3·330	1·788	·304	·033	1·520
1918	·699	3·414	·061	3·612	1·810	·228	·036	1·698
1919	·391	2·948	·025	3·109	·942	·179	·015	2·520
1920	·624	4·100	·078	3·745	1·586	·243	·056	3·541
1921	·857	3·954	·077	3·272	2·256	·292	·074	3·245
1922	·360	4·375	·037	3·434	1·859	·308	·049	3·254
1923	·219	4·028	·037	3·243	2·006	·287	·057	2·883
1924	·239	4·790	·062	3·382	2·229	·372	·081	2·902
1925	·228	5·223	·066	3·317	2·109	·380	·086	2·884
1926	·270	5·617	·074	3·468	2·505	·405	·092	3·118
1927	·323	5·525	·091	3·603	2·982	·413	·106	3·395
1928	·451	6·070	·122	3·727	4·161	·457	·170	3·726
Average	·859	4·031	·107	2·656	1·551	·203	·063	1·163

No. 2—COLLECTION in Ports on account of Excise Duties. Amount collected during fiscal year ended March 31, 1928

Ports	Spirits		Malt	Cigars	Manufactured Tobacco		Foreign Leaf		Other Materials	Malt Liquor	Licenses	Total
	Potable	Non-potable			Cigarettes	Tobacco	Unstemmed	Stemmed				
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Amherstburg		15,095 75				1,014 60					108 00	16,218 35
Belleville	3,933,557 42		7,314 00							1,660 50	550 00	3,943,081 92
Brantford		678 24	9,492 00								206 00	10,376 24
Chatham		969 09					27 60				56 00	1,052 69
Cobourg		16,133 44									125 00	16,258 44
Collingwood											25 00	25 00
Cornwall		510 84									125 00	635 84
Fort Frances			9,578 88								72 00	9,650 88
Fort William			7,249 11								106 00	7,355 11
Galt			7,252 92								75 00	7,327 92
Goderich											2 00	2 00
Guelph			97,979 43							2,211 00	352 00	100,542 43
Hamilton	106,494 15	26,321 35	65,115 03	1,310 59	2,676,526 67	155,996 38	486,862 80	12,479 40			1,125 50	3,532,231 87
Kenora			2,101 83								50 00	2,151 83
Kingston		4,952 35	19,532 70								175 00	24,660 05
Kitchener	739,201 14	851 40	90,635 91	1,360 65			495 60	226 80		10,345 20	595 00	843,711 70
Lindsay	12,023 13	418 71									506 00	12,947 84
London	53,817 56	9,686,16	285,437 40	26,372 32		2,084 00	54,654 40	2,690 40		90,809 25	1,344 50	526,895 99
Niagara Falls		565 16		233 80			120 00				100 00	1,018 96
North Bay											27 00	27 00
Oshawa											27 00	27 00
Ottawa	154,704 74	68,365 98	31,620 00			302 60					625 00	255,618 32
Owen Sound				1,205 40			712 00	173 40			50 00	2,140 80
Peterboro		300 72									52 00	352 72
Picton											2 00	2 00
Port Arthur			14,643 00								50 00	14,693 00
Port Hope		1,786 75									75 00	1,861 75
Prescott	402,642 32										550 00	403,192 32
Sarnia			23,476 77							12,382 20	402 00	36,260 97
Sault Ste. Marie			12,234 24	193 80			110 80				150 00	12,688 84
Simcoe											27 00	27 00
Stratford			1,070 46	381 53			100 40				150 00	1,702 39
St. Catharines			31,346 88	187 95			226 40				150 00	31,911 23
St. Thomas		373 76		438 45			546 00	131 60			152 00	1,641 81
Sudbury			26,361 30								50 00	26,411 30
Toronto	1,204,257 00	347,042 13	230,524 84	90,252 75	60 00	2,193 00	157,522 00	110,403 60		26,301 00	8,494 00	2,177,050 32
Wallaceburg											52 00	52 00
Welland			11,527 74	88 05							150 00	11,765 79
Whitby											1 00	1 00
Windsor	2,840,302 40	61,935 83	199,989 48							2,148 90	1,485 00	3,105,861 61
Woodstock		3,314 68									50 00	3,364 68
Total Ontario	9,446,999 86	559,302 34	1,184,483 92	122,025 29	2,676,586 67	161,590 58	701,378 00	126,105 20		145,858 05	18,469 00	15,142,798 91

Chicoutimi		3,568 00		201 93			50 00				150 00	3,969 93
Granby				60,179 60		815,921 80	459,566 40	1,071 00			450 00	1,337,188 80
Hull											53 00	53 00
Montreal	3,757,436 94	360,297 60	1,968,940 62	321,636 89	20,887,697 48	2,811,091 39	5,083,019 90	239,319 30	4,731 10	71,036 25	12,105 00	35,517,312 47
Quebec	933,150 67	27,141 83	57,914 91	11,476 28	5,356 80	530,890 08	82,281 35	163 20			1,454 00	1,649,829 12
Shawinigan Falls		123 76									129 00	252 76
Sherbrooke		4,142 16	5,754 48	701 40			574 00	254 40			500 00	11,926 44
Sorel	5,803 48		39 24								250 00	6,092 72
St. Hyacinthe	5,822 08			422 10			10,449 60	8,397 60			349 00	25,440 38
St. Johns		425 70		19,848 27		1,076 00	13,675 40				177 00	35,202 37
Sutton		198 00										198 00
Three Rivers		383 12				16,982 80					225 00	17,590 92
Valleyfield		1,357 49	10,638 00								200 00	12,195 49
Total Quebec	4,702,213 17	397,637 66	2,043,287 25	414,466 47	20,893,054 28	4,175,962 07	5,649,616 65	249,205 50	4,731 10	71,036 25	16,042 00	38,617,252 40
Fredericton	196,681 45										100 00	196,781 45
Moncton		340 56									75 00	415 56
St. John		18,878 94	22,885 29	754 62			562 00	24 00			952 00	44,056 85
St. Stephens		1,017 98									100 00	1,117 98
Woodstock		7,586 18									150 00	7,736 18
Total New Brunswick	196,681 45	27,823 66	22,885 29	754 62			562 00	24 00			1,377 00	250,108 02
Amherst											27 00	27 00
Digby											2 00	2 00
Halifax	15,646 28	4,489 88	15,156 00								448 00	35,740 16
Sydney											2 00	2 00
Yarmouth		340 56		612 90			465 20	8 40			100 00	1,527 06
Total Nova Scotia	15,646 28	4,830 44	15,156 00	612 90			465 20	8 40			579 00	37,298 22
Charlottetown, P.E.I.		340 56				38,014 40					204 00	38,558 96
Brandon			17,658 00								125 00	17,783 00
Portage la Prairie											2 00	2 00
Winnipeg	365,710 44	129,491 79	293,176 98	568 74		2,450 00	4,811 60	57 00		1,650 75	3,498 00	801,415 30
Total Manitoba	365,710 44	129,491 79	310,834 98	568 74		2,450 00	4,811 60	57 00		1,650 75	3,625 00	819,200 30
Moose Jaw			27,546 00								166 00	27,712 00
North Portal											25 00	25 00
Prince Albert	76 16		19,692 00								56 00	19,824 16
Regina	453,177 41		30,139 62								148 50	483,465 53
Saskatoon	23 10	323 49	35,280 00	10 54			8 40				272 00	35,917 53
Total Saskatchewan	453,276 67	323 49	112,657 62	10 54			8 40				667 50	566,944 22
Calgary	158,676 59	3,526 92	155,268 15	267 75			210 80	24 00			974 00	318,948 21
Edmonton	132,925 69	11,221 55	92,862 00	40 35			59 60	24 00			628 00	237,761 19
Lethbridge			81,975 96							11,817 75	104 00	93,897 71
Medicine Hat			1,849 20								50 00	1,899 20
Total Alberta	291,602 28	14,748 47	331,955 31	308 10			270 40	48 00		11,817 75	1,756 00	652,506 31

No. 2—COLLECTION in Ports on account of Excise Duties. Amount collected during fiscal year ended March 31, 1928—*Con.*

Ports	Spirits		Malt	Cigars	Manufactured Tobacco		Foreign Leaf		Other Materials	Malt Liquor	Licenses	Total
	Potable	Non-potable			Cigarettes	Tobacco	Unstemmed	Stemmed				
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Cranbrook			9,873 00								50 00	9,923 00
Fernie			10,218 00								50 00	10,268 00
Nanaimo			258 00	320 10			558 40				200 00	1,336 50
Nelson			14,607 00									14,607 00
New Westminster	785,339 99		54,500 43	378 00			365 20	345 00		2,248 80	400 00	843,577 42
Penticton			3,360 00								50 00	3,410 00
Revelstoke			4,200 00								250 00	4,450 00
Rossland											50 00	50 00
Vancouver	713,234 61	21,517 92	95,189 31	5,763 97		3,536 80	4,339 60	5,444 40		1,608 45	2,450 00	853,085 06
Victoria	131,944 07	1,188 42	61,500 00	144 76							325 00	195,102 25
Total British Columbia	1,630,518 67	22,706 34	253,705 74	6,606 83		3,536 80	5,263 20	5,789 40		3,857 25	3,825 00	1,935,809 23
Dawson, Yukon	1,558 75										50 00	1,608 75
Grand Total	**17,104,207 57**	**1,157,204 75**	**4,274,966 11**	**545,353,49**	**23,569,640 95**	**4,381,553 85**	**6,362,375 45**	**381,237 50**	**4,731 10**	**234,220 05**	**46,594 50**	**58,062,085 32**
SUMMARY												
Ontario	9,446,999 86	559,302 34	1,184,483 92	122,025 29	2,676,586 67	161,590 58	701,378 00	126,105 20		145,858 05	18,469 00	15,142,798 91
Quebec	4,702,213 17	397,637 66	2,043,287 25	414,466 47	20,893,054 28	4,175,962 07	5,649,616 65	249,205 50	4,731 10	71,036 25	16,042 00	38,617,252 40
New Brunswick	196,681 45	27,823 66	22,885 29	754 62			562 00	24 00			1,377 00	250,108 02
Nova Scotia	15,646 28	4,830 44	15,156 00	612 90			465 20	8 40			579 00	37,298 22
P. E. Island		340 56				38,014 40					204 00	38,558 96
Manitoba	365,710 44	129,491 79	310,834 98	568 74		2,450 00	4,811 60	57 00		1,650 75	3,625 00	819,200 30
Saskatchewan	453,276 67	323 49	112,657 62	10 54			8 40				667 50	566,944 22
Alberta	291,602 28	14,748 47	331,955 31	308 10			270 40	48 00		11,817 75	1,756 00	652,506 31
British Columbia	1,630,518 67	22,706 34	253,705 74	6,606 83		3,536 80	5,263 20	5,789 40		3,857 25	3,825 00	1,935,809 23
Yukon	1,558 75										50 00	1,608 75
Total	**17,104,207 57**	**1,157,204,75**	**4,274,966 11**	**545,353 49**	**23,569,640 95**	**4,381,553 85**	**6,362,375 45**	**381,237 50**	**4,731 10**	**234,220 05**	**46,594 50**	**58,062,085 32**

No. 3—Comparative Statement of Excise Duties collected during the fiscal years ended March 31, 1927 and 1928

Provinces	Spirits		Malt	Cigars	Manufactured Tobacco		Foreign Leaf		Canada Twist	Other Materials	Malt Liquor	Licenses	Total
	Potable	Non-potable			Cigarettes	Tobacco	Unstemmed	Stemmed					
1927	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario	6,532,011 11	598,600 96	834,626 21	125,371 91	2,155,309 56	153,323 70	650,170 60	94,999 20	8 00	.....	110,523 60	17,091 00	11,272,035 85
Quebec	3,482,888 53	466,201 75	1,919,578 66	397,964 19	17,855,895 10	4,120,571 60	5,334,111 40	204,091 60	.....	5,379 24	58,332 75	15,468 50	33,860,483 32
New Brunswick	103,966 69	26,283 92	36,005 01	817 97	.....	.....	561 60	.....	.....	.....	.....	927 00	168,562 19
Nova Scotia	15,799 08	4,394 43	12,045 00	570 60	.....	.....	403 20	60 00	.....	.....	.....	659 00	33,931 31
Prince Edward Island	.....	340 56	.....	.....	.....	36,829 80	70 80	.....	.....	.....	.....	206 00	37,447 16
Manitoba	349,861 45	133,547 74	306,623 34	458 18	.....	2,569 20	4,781 60	70 20	.....	.....	27,348 00	3,529 00	828,788 71
Saskatchewan	480,290 86	640 25	102,958 20	23 84	.....	.....	16 00	.....	.....	.....	.....	676 00	584,605 15
Alberta	261,344 45	14,593 37	336,144 90	477 30	.....	.....	904 20	58 60	.....	.....	21,173 10	1,386 00	636,082 12
British Columbia	1,400,868 42	22,713 36	261,775 26	6,257 28	.....	4,608 10	5,301 20	5,488 20	.....	.....	969 60	3,600 00	1,711,581 42
Yukon	5,237 26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50 00	5,287 26
Totals	**12,632,267 85**	**1,267,316 34**	**3,809,756 58**	**531,941 27**	**20,011,204 66**	**4,317,902 40**	**5,996,320 60**	**304,768 00**	**8 00**	**5,379 24**	**218,347 05**	**43,592 50**	**49,138,804 49**
1928													
Ontario	9,446,999 86	559,302 34	1,184,483 92	122,025 29	2,676,586 67	161,590 58	701,378 00	126,105 20	.....	.....	145,858 05	18,469 00	15,142,798 91
Quebec	4,702,213 17	397,637 66	2,043,287 25	414,466 47	20,893,054 28	4,175,962 07	5,649,616 65	249,205 50	.....	4,731 10	71,036 25	16,042,00	38,617,252 40
New Brunswick	196,681 45	27,823 66	22,885 29	754 62	.....	.....	562 00	24 00	.....	.....	.....	1,377 00	250,108 02
Nova Scotia	15,646 28	4,830 44	15,156 00	612 90	.....	.....	465 20	8 40	.....	.....	.....	579 00	37,298 22
Prince Edward Island	.....	340 56	.....	.....	.....	38,014 40	.....	.....	.....	.....	.....	204 00	38,558 96
Manitoba	365,710 44	129,491 79	310,834 98	568 74	.....	2,450 00	4,811 60	57 00	.....	.....	1,650 75	3,625 00	819,200 30
Saskatchewan	453,276 67	323 49	112,657 62	10 54	.....	.....	8 40	.....	.....	.....	.....	667 50	566,944 22
Alberta	291,602 28	14,748 47	331,955 31	308 10	.....	.....	270 40	48 00	.....	.....	11,817 75	1,756 00	652,506 31
British Columbia	1,630,518 67	22,706 34	253,705 74	6,606 83	.....	3,536 80	5,263 20	5,789 40	.....	.....	3,857 25	3,825 00	1,935,809 23
Yukon	1,558 75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50 00	1,608 75
Totals	**17,104,207 57**	**1,157,204 75**	**4,274,966 11**	**545,353 49**	**23,569,640 95**	**4,381,553 85**	**6,362,375 45**	**381,237 50**	.....	**4,731 10**	**234,220 05**	**46,594 50**	**58,062,085 32**

EXCISE DUTY REVENUES

No. 4.—Comparative Statement of Receipts for 1925-26, 1926-27 and 1927-28

—		Totals
		$ cts.
Spirits	1925–26	10,928,078 03
	1926–27	13,899,584 19
	1927–28	18,261,412 32
Malt Liquor	1925–26	108,637 50
	1926–27	218,347 05
	1927–28	234,220 05
Malt	1925–26	3,839,173 67
	1926–27	3,809,756 58
	1927–28	4,274,966 11
Tobacco	1925–26	27,915,989 27
	1926–27	30,635,582 90
	1927–28	34,699,538 85
Cigars	1925–26	533,443 17
	1926–27	531,941 27
	1927–28	545,353 49
Licenses	1925–26	43,559 00
	1926–27	43,592 50
	1927–28	46,594 50
Total Revenue	**1925–26**	**43,368,880 64**
	1926–27	**49,138,804 49**
	1927–28	**58,062,085 32**

No. 5—STATEMENT showing the quantities of the several articles subject to Excise Duty, entered for consumption during the fiscal years ended March 31, 1926, 1927, 1928, and the duty accrued thereon

Articles subject to Excise Duty	1926				1927				1928			
	Quantities			Duty	Quantities			Duty	Quantities			Duty
	Ex-manufactory	Ex-warehouse	Totals		Ex-manufactory	Ex-warehouse	Totals		Ex-manufactory	Ex-warehouse	Totals	
	P. Gals.	P. Gals.	P. Gals.	$ cts.	P. Gals.	P. Gals.	P. Gals.	$ cts.	P. Gals.	P. Gals.	P. Gals.	$ cts.
Spirits	6,153	2,192,080	2,198,233	10,928,078 03	1,585	2,574,170	2,575,755	13,899,584 19	3,818	2,965,979	2,969,797	18,261,412 32
	Gals.	Gals.	Gals.		Gals.	Gals.	Gals.		Gals.	Gals.	Gals.	
Malt liquor, the duty being paid on malt	52,098,864	344,641	52,443,505	109,682 55	50,434,297	1,291,954	51,726,251	219,708 15	57,047,374	1,343,986	58,391,360	234,220 05
	Lb.	Lb.	Lb.		Lb.	Lb.	Lb.		Lb.	Lb.	Lb.	
Malt	3,612	127,786,117	127,789,729	3,839,173 67	1,050,770	125,917,206	126,967,976	3,809,756 58	383,490	142,160,457	142,543,947	4,274,966 11
	No.	No.	No.		No.	No.	No.		No.	No.	No.	
Cigars	89,262,473	85,100,715	174,363,188	533,899 58	83,394,438	91,941,400	175,335,838	531,645 18	87,743,934	93,986,680	181,730,614	545,395 51
Cigarettes	2,532,563,260	350,884,900	2,883,448,160	17,308,109 01	3,203,335,910	130,663,950	3,333,999,860	20,011,204 66	3,760,184,475	166,837,850	3,927,022,325	23,569,641 00
	Lb.	Lb.	Lb.		Lb.	Lb.	Lb.		Lb.	Lb.	Lb.	
Canada twist	200	.....	200	40 00	40	.....	40	8 00	.....	.....	.....	.....
Tobacco	17,631,772	3,140,470	20,772,242	4,154,448 40	18,582,184	2,152,931	20,735,115	4,147,023 10	19,456,367	1,505,750	20,962,117	4,192,423 40
Snuff	823,041	.....	823,041	164,608 20	854,617	.....	854,617	170,923 40	945,630	.....	945,630	189,126 00
Totals	18,455,013	3,140,470	21,595,483	21,627,205 51	19,436,841	2,152,931	21,589,772	24,329,159 16	20,401,997	1,505,750	21,907,747	27,951,190 40
Raw leaf tobacco, foreign	.....	15,471,376	15,471,376	6,284,383 30	.....	15,489,811	15,489,811	6,301,088 60	.....	16,539,478	16,539,478	6,743,612 95
Other materials	18,472	.....	18,472	4,248 56	23,388	.....	23,388	5,379 24	20,570	.....	20,570	4,731 10
Total duties on tobacco and cigarettes	.....	.....	.....	27,915,837 47	.....	.....	.....	30,635,627 00	.....	.....	.....	34,699,534 45
Licenses, spirits	.....	.....	.....	4,500 00	.....	.....	.....	5,000 00	.....	.....	.....	6,125 00
" malt liquor	.....	.....	.....	4,250 00	.....	.....	.....	4,125 00	.....	.....	.....	5,025 00
" malt	.....	.....	.....	1,600 00	.....	.....	.....	1,800 00	.....	.....	.....	2,100 00
" cigars	.....	.....	.....	5,400 00	.....	.....	.....	5,200 00	.....	.....	.....	4,500 00
" tobacco	.....	.....	.....	3,214 00	.....	.....	.....	2,791 00	.....	.....	.....	2,825 00
" sundry	.....	.....	.....	24,595 00	.....	.....	.....	24,676 50	.....	.....	.....	26,019 50
Grand total duty	.....	.....	.....	**43,370,230 30**	.....	.....	.....	**49,139,913 60**	.....	.....	.....	**58,062,122 94**

SPIRITS

No. 6—Comparative Statement of Manufactures for

Provinces	Licenses		Material Taken				
			Grain				
	No.	Fees	Malt	Indian Corn	Rye	Oats	Wheat
1927		$	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Ontario	7	1,750	7,329,053	40,787,185	13,918,368	128,320	165,300
Quebec	8	2,000	3,563,482	11,239,910	4,450,814	105,840	.....
Manitoba	2	500	722,969	4,387,356	485,808	.....	1,450,720
British Columbia	3	750	1,035,303	6,064,455	2,274,091	49,790	.....
Totals	**20**	**5,000**	**12,650,807**	**62,478,906**	**21,129,081**	**283,950**	**1,616,020**
1928							
Ontario	8	2,250	14,636,482	51,242,965	33,075,051	137,616	106,200
Quebec	8	2,000	7,447,703	16,283,849	13,585,737	1,568	.....
New Brunswick	1	250	.....	.....	.....	.....	.....
Manitoba	2	625	169,790	1,236,528	88,446	.....	143,460
British Columbia	4	1,000	2,862,125	10,108,242	6,868,461	.....	.....
Totals	**23**	**6,125**	**25,116,100**	**78,871,584**	**53,617,695**	**139,184**	**249,660**

SPIRITS

the Fiscal Years ended March 31, 1927 and 1928

for use		Used in spirits manufactured		Proof Spirits manufactured	Duty collected ex-manufactory on deficiencies and assessments		Total duty collected ex-manufactory, including license fees
Total Grain	Molasses	Grain	Molasses				
Lbs.	Lbs.	Lbs.	Lbs.	P. Galls.	P. Galls.	$ cts.	$ cts.
62,328,226	35,954,390	61,606,654	35,897,990	5,472,193 70	988 77	8,903,72	10,653 72
19,360,046	30,113,585	19,378,022	30,100,145	2,538,459 37	383 27	3,449 43	5,449 43
7,046,853	.....	7,088,853	.....	420,108 04	212 78	1,919 28	2,419 28
9,423,639	2,779,456	9,383,055	2,779,456	690,289 54	.....	.....	750 00
98,158,764	**68,847,431**	**97,456,584**	**68,777,591**	**9,121,050 65**	**1,584 82**	**14,272 43**	**19,272 43**
99,198,314	23,721,200	98,729,282	23,596,200	7,156,709 25	28 69	259 07	2,509 07
37,318,857	23,192,271	37,263,147	22,918,671	3,098,301 07	1,002 33	9,029 30	11,029 30
.....	988 054	.....	988,054	35,456 06	.....	.....	250 00
1,638,224	.....	1,713,824	.....	102,564 25	.....	.....	625 00
19,838,828	1,899,970	19,885,476	1,899,970	1,203,169 45	2,786 45	25,133 78	26,133 78
157,994,223	49,801,495	157,591,729	49,402,895	11,596,200 08	3,817 47	34,422 15	40,547 15

SPIRITS

No. 7—Comparative Statement showing transactions in the Distilleries in the Dominion of Canada, during the fiscal years ended March 31, 1927 and 1928

Provinces	In process, including deficiencies brought forward	Manufactured, including surpluses	Returned to distillery for redistillation	Received from other sources duty paid	Totals	Warehoused	Spirits and fusel oil written off	Deficiencies on which duty was collected	In process, including deficiencies, carried forward	Totals
	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
1927										
Ontario	297,070 95	5,472,193 70	1,070,447 73	178,630 95	7,018,343 33	6,546,647 18	4,153 08	988,77	466,554 30	7,018,343 33
Quebec	128,374 07	2,538,459 37	544,890 85	20,520 94	3,232,245 23	2,937,783 72	7,183 40	383 27	286,894 84	3,232,245 23
Manitoba	36,257 73	420,168 04	170,044 25	2,468 09	628,878 11	589,820 09	1,159 39	212 78	37,685 85	628,878 11
British Columbia	118,880 08	690,289 54	18,000 58	9,599 73	836,769 93	767,750 27	261 53	.....	68,758 13	836,769 93
Totals	**580,582 83**	**9,121,050 65**	**1,803,383 41**	**211,219 71**	**11,716,236 60**	**10,842,001 26**	**12,757 40**	**1,584 82**	**859,893 12**	**11,716,236 60**
1928										
Ontario	466,554 30	7,156,709 25	1,361,414 64	163,104 65	9,147,782 84	8,758,782 02	8,893,89	28 69	380,078 24	9,147,782 84
Quebec	286,894 84	3,098,301 07	321,037 78	79,817 96	3,786,051 65	3,564,509 17	8,759 42	1,002 33	211,780 73	3,786,051 65
New Brunswick	.....	35,456 06	.....	.....	35,456 06	13,083 39	.....	.....	22,372 67	35,456 06
Manitoba	37,685 85	102,564 25	131,800 79	1,878 86	273,929 75	260,321 19	300 47	.....	13,308 09	273,929 75
British Columbia	67,758 13	1,203,169 45	33,313 35	11,136 52	1,316,377 45	1,254,621 46	1,390 88	2,786 45	57,578 66	1,316,377 45
Totals	**859,893 12**	**11,596,200 08**	**1,847,566 56**	**255,937 99**	**14,559,597 75**	**13,851,317 23**	**19,344 66**	**3,817 47**	**685,118 39**	**14,559,597 75**

DR. SPIRITS

No. 8—STATEMENT of Warehouse Returns for the Fiscal Year ended March 31, 1928

Ports	Remaining in Warehouse from last year	Warehoused	Imported	Received from other Ports: Removed during year	Received from other Ports: In Transit last year	Totals
	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
Amherstburg	998·25			58,124·77		59,123·02
Belleville	3,420,993·97	4,431,430·87	2,367·52	203,359·98	11,249·59	8,069,401·93
Brantford	70·95			353·55		424·50
Chatham	143·54		352·36			495·90
Cobourg	1,345·41			6,045·11		7,390·52
Cornwall				212·85		212·85
Hamilton	3,413·64		2,195·59	38,183·34	283·80	44,076·37
Kingston	872·03			16,273·31		17,145·34
Kitchener	1,485,662·43	262,282·56		6,192·75		1,754,137·74
Lindsay		321,398·63		9,361·42		330,760·05
London	355·40			9,559·90	1,212·69	11,127·99
Niagara Falls				233·81		233·81
Ottawa	5,404·40		2,483·65	49,303·61		57,191·66
Port Hope				744·48		744·48
Peterboro				165·00		165·00
Prescott	834,996·26			293,793·74		1,128,790·00
St. Thomas	143·62			354·75		498·37
Toronto	1,747,385·68	1,832,605·35	1,183·96	663,252·34	158·40	4,244,585·73
Windsor	4,571,811·94	1,911,064·61		29,661·52		6,512,554·57
Woodstock	496·65	*16·50		12,061·50		12,558·15
Total, Ontario	12,074,094·17	8,758,782·02 *16·50	8,583·08	1,397,237·73	12,904·48	22,251,617·98
Chicoutimi				1,411·76	74·91	1,486·67
Montreal	2,639,464·30	‡4·22 3,461,376·72 †1,961·90	449·76	239,497·93	2,593·21	6,345,348 04
Quebec	33,146·25			151,780·94	299·52	185,226·71
Shawinigan Falls				165·00		165·00
Sorel	3,873·18	43,351·52		4,975·32		52,200·02
St. Hyacinthe	265,348·47	59,780·93		47,182·81		372,312·21
Sherbrooke	70·95			1,826·55	82·50	1,980·00
Sutton				82·50		82·50
St. Johns				2,838·00		2,838·00
Three Rivers	28·57			354·75		383·32
Valleyfield				565·62		565·62
Total, Quebec	2,941,931·72	†1,961·90 3,564,509·17 ‡4·22	449·76	450,681·18	3,050·14	6,962,588·09
Fredericton	3,328·96			19,986·35		23,315·31
Moncton				141·90		141·90
St. John	1,238·32	13,083·39		23,073·18	425·70	37,820·59
St. Stephen				424·16		424·16
Woodstock	141·90			3,016·70	73·26	3,231·86
Total, New Brunswick	4,709·18	13,083·39		46,642·29	498·96	64,933·82
Halifax	1,635·45			2,449·26	141·90	4,226·61
Yarmouth				141·90		141·90
Total, Nova Scotia	1,635·45			2,591·16	141·90	4,368·51
Charlottetown, P. E. Island				191·90		141·90
Winnipeg, Man	235,482·36	260,321·19		159,932·40	6,454·27	662,190·22
Prince Albert						
Regina	12,895·13			44,669·69	1,951·80	59,516·62
Saskatoon				431·32		431·32
Total, Saskatchewan	12,895·13			45,101·01	1,951·80	59,947·94
Calgary	10,408·22			20,778·57		31,186·79
Edmonton	5,316·32			44,093·51	721·22	50,131·05
Total, Alberta	15,724·54			64,872·08	721·22	81,317·84
New Westminster	665,780·27	695,805·43				1,361,585·70
Vancouver	411,286·90	558,816·03		66,620·33		1,036,723·26
Victoria	2,276·90			14,622·15		16,899·05
Total, British Columbia	1,079,344·07	1,254,621·46		81,242·48		2,415,208·01
Dawson, Yukon	249·39					249·39
Sundries	8,612·54					8,612·54
Grand Totals	**16,374,678·55**	**13,851,317·23** ***16·50** **†1,961·90** **‡4·22**	**9,032·84**	**2,248,442·23**	**25,722·77**	**32,511,176·24**

*Re-warehoused. †Seizure. ‡Surplus.

SPIRITS

DR. No. 8—STATEMENT of Warehouse Returns for the

Ports	Entered for Consumption			Removed to other Ports	
	Quantity	Used in Bonded Factories	Duty	Warehoused in Ports to which removed	In Transit
	P. Galls.	P. Galls.	$ cts.	P. Galls.	P. Galls.
Amherstburg		56,310·43	15,095 75		
Belleville	435,875·85		3,933,557 42	903,873·15	16,021·13
Brantford		282·60	678 24		
Chatham		354·93	969 09		
Cobourg		6,722·27	16,133 44		
Cornwall		212·85	510 84		
Hamilton	11,827·48	31,555·45	132,815 50		
Kingston		16,714·68	4,952 35		
Kitchener	82,279·23	425·70	740,052 54	22,789·05	
Lindsay	1,353·84		12,182 77	97,325·34	
London	5,979·53	4,035·90	63,503 72		
Niagara Falls		233·81	565 16		
Ottawa	17,185·81	30,141·49	223,070 72		
Port Hope		744·48	1,786 75		
Peterboro		123·75	300 72		
Prescott	44,773·65		402,642 32	180,849·83	
St. Thomas		498·37	373 76		
Toronto	133,422·03	307,915·14	1,551,299 13	118,087·52	1,267·78
Windsor	317,127·58	29,265·89	2,902,238 23	458,703·35	925·34
Woodstock		12,558·15	3,314 68		
Total, Ontario	1,049,825·00	498,095·89	10,006,043 13	1,781,628·24	18,214·25
Chicoutimi		1,486·67	3,568 00		
Montreal	419,032·83	291,081·74	4,112,462 16	237,902·54	942·15
Quebec	103,638·89	56,740·98	960,292 50	133·79	
Shawinigan Falls		165 00	123 76		
Sorel	226·89		2,046 56		
St. Hyacinthe	483·36		5,822 08	110,769·07	
Sherbrooke		1,725·90	4,142 16	41·25	
Sutton		82·50	198 00		
St. Johns		2,838·00	425 70		
Three Rivers		354·75	383 12		
Valleyfield		565·62	1,357 49		
Total, Quebec	523,381·97	355,041·16	5,090,821 53	348,846·65	942·15
Fredericton	21,830·22		196,681 45		
Moncton		141·90	340 56		
St. John		13,243·40	18,878 94		
St. Stephen		424·16	1,017 98		
Woodstock		3,160·91	7,586 18		
Total, New Brunswick	21,830·22	16,970·37	224,505 11		
Halifax	1,737·68	1,870·78	20,136 16		
Yarmouth		141·90	340 56		
Total, Nova Scotia	1,737·68	2,012·68	20,476 72		
Charlottetown, P. E. Island		141·90	340 56		
Winnipeg, Man	40,714·62	156,559·42	495,202 23	43,003·35	
Prince Albert			76 16		
Regina	50,338·59		453,177 41	365·21	
Saskatoon		431·32	346 59		
Total, Saskatchewan	50,338·59	431·32	453,600 16	365·21	
Calgary	17,648·59	4,433·84	162,203 51	141·71	
Edmonton	14,766·80	24,905·28	144,147 24	794·77	
Total, Alberta	32,415·39	29,339·12	306,350 75	936·48	
New Westminster	84,717·28		785,339 99	37,686·20	
Vancouver	76,567·34	10,534·83	709,618 75	35,903·43	
Victoria	14,655·65	495·19	133,132 49	72·67	
Total, British Columbia	175,940·27	11,030·02	1,628,091 23	73,662·30	
Dawson, Yukon	173·20		1,558 75		
Sundries					
Grand Totals	**1,896,356·94**	**1,069,621·88**	**18,226,990 17**	**2,248,442·23**	**19,156·40**

SPIRITS

Fiscal Year ended March 31, 1928 CR.

Taken for Redistillation	Free		Exported	Remaining in Warehouse	Totals
	Legal Allowance	Other			
P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
...	...	...	...	2,812·59	59,123·02
1,155,901·22	124,725·41	919,638·93	241,896·09	4,271,470·15	8,069,401·93
...	...	...	...	141·90	424·50
...	...	...	...	140·97	495·90
...	...	...	...	668·25	7,390·52
...	...	...	...	...	212·85
...	...	...	...	693·44	44,076·37
...	...	...	...	430·66	17·145·34
45·21	20,919·08	56,883·73	4,119·66	1,566,676·08	1,754,137·74
13,308·63	...	140,072·69	794·56	77,904·99	330,760·05
...	...	...	...	1,112·56	11,127·99
...	...	...	...	...	233·81
...	...	...	...	9,864·36	57,191·66
...	...	...	...	...	744·48
...	...	...	...	41·25	165·00
...	31,939·59	126,028·09	50,275·78	694,923·06	1,128,790·00
...	...	...	...	...	498·37
5,871·72	10,609·43	326,304·69	9,923·35	3,331,184·07	4,244,585·73
186,287·86	201,620·41	25,615·34	164,847·18	5,128,161·62	6,512,554·57
...	...	...	...	...	12,558·15
1,361,414·64	389,813·92	1,594,543·47	471,856·62	15,086,225·95	22,251,617·98
...	...	...	...	...	1,486·67
276,717·31	42,361·01	837,615·54	11,183·65	4,228,511·27	6,345,348·04
...	...	693·00	...	24,020·05	185,226·71
...	...	...	...	...	165·00
...	...	...	...	51,973·13	52·200·02
44,320·47	1,369·39	...	27,333·52	188,036·40	372,312·21
...	...	...	...	212·85	1,980·00
...	...	...	...	...	82·50
...	...	...	...	...	2,838·00
...	...	...	...	28·57	383·32
...	...	...	...	...	565·62
321,037·78	43,730·40	838,308·54	38,517·17	4,492,782·27	6,962,588·09
...	...	1·41	2·93	1,480·75	23,315·31
...	...	...	...	...	141·90
...	...	13,083·39	...	11,493·80	37,820·59
...	...	...	...	...	424·16
...	...	...	...	70·95	3,231·86
...	...	13,084·80	2·93	13,045·50	64,933·82
...	...	...	...	618·15	4,226·61
...	...	...	...	...	141·90
...	...	...	...	618·15	4,368·51
...	...	...	...	...	141·90
131,800·79	5,862·23	79,419·33	...	204,830·48	662,190·22
...	...	...	...	...	...
...	...	674·52	...	8,138·30	59,516·62
...	...	...	...	...	431·32
...	...	674·52	...	8,138·30	59,947·94
...	...	...	...	8,962·65	31,186·79
...	...	...	...	9,664·20	50,131·05
...	...	...	...	18,626·85	81,317·84
33,313·35	17,154·08	36,928·66	7,905·10	1,143,881·03	1,361,585·70
...	7,866·28	74,384·97	61,117·36	770,349·05	1,036,723·26
...	...	...	20·68	1,654·86	16,899·05
33,313·35	25,020·36	111,313·63	69,043·14	1,915,884·94	2,415,208·01
...	...	...	...	76·19	249·35
...	...	...	...	8,612·54	8,612·54
1,847,566·56	**464,426·91**	**2,637,344·29**	**579,419·86**	**21,748,841·17**	**32,511,176·24**

SPIRITS

DR. No. 9—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928 CR.

Provinces	Remaining in Warehouse from last year	Warehoused	Imported	Received from other Ports: Removed during year	Received from other Ports: In Transit last year	Totals
	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.	P. Galls.
1927						
Ontario	10,060,130·00	6,546,647·18	155,925·08	1,125,384·54	21,195·62	17,909,282·42
Quebec	1,848,723·49	2,937,783·72	456·11	597,385·92	13,185·87	5,397,535·11
New Brunswick	3,660·01	.....	.....	25,770·55	216·15	29,646·71
Nova Scotia	2,724·26	.....	.....	2,307·05	189·75	5,221·06
Prince Edward Island	.....	.....	.....	141·90	.....	141·90
Manitoba	180,370·04	*294·40 589,820·09	.....	175,983·39	1,453·07	947,920·99
Saskatchewan	8,607·11	.....	.....	57,730·84	1,755·68	68,093·63
Alberta	19,708·16	‡0·94	.....	54,087·06	.....	73,796·16
British Columbia	626,863·39	767,750·27	.....	84,613·82	.....	1,479,227·48
Yukon	.....	.....	.....	831·29	.....	831·29
Sundries	8,612·54	.....	.....	.....	.....	8,612·54
Totals	**12,759,399·00**	**10,842,001·26** ***294·40** **‡0·94**	**156,381·19**	**2,124,236·36**	**37,996·14**	**25,920,309·29**
1928						
Ontario	12,074,094·17	*16·50 8,758,782·02 ‡4·22	8,583·08	1,397,237·73	12,904·48	22,251,617·98
Quebec	2,941,931·72	3,564,509·17 †1,961·90	449·76	450,681·18	3,050·14	6,962,588·09
New Brunswick	4,709·18	13,083·39	.....	46,642·29	498 86	64,933·82
Nova Scotia	1,635·45	.....	.....	2,591·16	141·90	4,368·51
Prince Edward Island	.....	.....	.....	141·90	.....	141·99
Manitoba	235,482·36	260,321·19	.....	159,932·40	6,454·27	662,190·22
Saskatchewan	12,895·13	.....	.....	45,101·01	1,951·80	59,947·94
Alberta	15,724·54	.....	.....	64,872·08	721·22	81,317·84
British Columbia	1,079,344·07	1,254,621·46	.....	81,242·48	.....	2,415,208·01
Yukon	249·39	.....	.....	.....	.....	249·39
Sundries	8,612·54	.....	.....	.....	.....	8,612·54
Totals	**16,374,678·55**	**‡4·22** **13,851,317·23** ***16·50** **†1,961·90**	**9,032·84**	**2,248,442·23**	**25,722·77**	**32,511,176·24**

*Rewarehoused. †Seizures. ‡Surplus.

Provinces	Entered for Consumption			Removed to other port		Taken for Redistillation	Free		Exported	Remaining in Warehouse	Totals
	Quantity	Used in Bonded Factories	Duty	Warehoused in ports to which removed	In Transit		Legal Allowance	Other			
	P. Gals.	P. Gals.	$ cts.	P. Gals.	P. Gals.	P. Gals.	P. Gals.	P. Gals.	P. Gals.	P. Gals.	P. Gals.
1927											
Ontario	723,680·77	560,982·32	7,121,708 35	1,459,857·02	7,735·52	1,077,847·12	198,274·92	1,303,795·42	503,015·16	12,074,094·17	17,909,282·42
Quebec	387,364·64	391,696·97	3,945,640 85	348,140·01	6,016·44	544,890·85	13,590·79	742,202·13	21,701·56	2,941,931·72	5,397,535·11
New Brunswick	11,541·57	13,394·47	130,250 61	.....	.....	.....	.....	.....	1·49	4,709·18	29,646·71
Nova Scotia	1,754·60	1,831·01	20,193 51	.....	.....	.....	.....	.....	.....	1,635·45	5,221·06
Prince Edward Island	.....	141·90	340 56	.....	.....	.....	.....	.....	.....	.....	141·90
Manitoba	38,946·44	159,895·37	481,489 91	259,111·05	11,970·81	170,044·25	2,197·04	70,273·67	.....	235,482·36	947,920·99
Saskatchewan	53,352·96	1,845·54	480,931 11	.....	.....	.....	.....	.....	.....	12,895·13	68,093·63
Alberta	29,033·17	27,727·45	275,937 82	1,168·08	.....	.....	.....	142·92	.....	15,724·54	73,796·16
British Columbia	157,854·69	12,544·03	1,423,581 78	55,960·20	.....	18,000·58	14,942·80	93,508·53	47,072·58	1,079,344·07	1,479,227·48
Yukon	581·90	.....	5,237 26	.....	.....	.....	.....	.....	.....	249·39	831·29
Sundries	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,612·54	8,612·54
Totals	**1,404,110·74**	**1,170,059·06**	**13,885,311 76**	**2,124,236·36**	**25,722·77**	**1,810,782·80**	**229,005·55**	**2,209,922·67**	**571,790·79**	**16,374,678.55**	**25,920,309·29**
1928											
Ontario	1,049,825·00	498,095·89	10,006,043 13	1,781,628·24	18,214·25	1,361,414·64	389,813·92	1,594,543·47	471,856·62	15,086,225·95	22,251,617·98
Quebec	523,381 97	355,041·16	5,090,821 53	348,846·65	942·15	321,037·78	43,730·40	838,308·54	38,517·17	4,492,782·27	6,962,588·09
New Brunswick	21,830·22	16,970·37	224,505 11	.....	.....	.....	.....	13,084·80	2·93	13,045·50	64,933·82
Nova Scotia	1,737·68	2,012·68	20,476 72	.....	.....	.....	.....	.....	.....	618·15	4,368·51
Prince Edward Island	.....	141·90	340 56	.....	.....	.....	.....	.....	.....	.....	141·90
Manitoba	40,714·62	156,559·42	495,202 23	43,003·35	.....	131,800·79	5,862·23	79,419·33	.....	204,830·48	662,190·22
Saskatchewan	50,338·59	431·32	453,600 16	365·21	.....	.....	.....	674·52	.....	8,138·30	59,947·94
Alberta	32,415·39	29,339·12	306,350 75	936·48	.....	.....	.....	.....	.....	18,626·85	81,317·84
British Columbia	175,940·27	11,030·02	1,628,091 23	73,662·30	.....	33,313·35	25,020·36	111,313·63	69,043·14	1,915,884·94	2,415,208·01
Yukon	173·20	.....	1,558 75	.....	.....	.....	.....	.....	.....	76·19	249·39
Sundries	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,612·54	8,612·54
Totals	**1,896,356·94**	**1,069,621·88**	**18,226,990 17**	**2,248,442·23**	**19,156·40**	**1,847,566·56**	**464,426·91**	**2,637,344·29**	**579,419·86**	**21,748,841.17**	**32,511,176·24**

	1927	1928
Total duty collected ex-manufactory and ex-warehouse	$13,899,584 19	$18,261,412 32
License fees	5,000 00	6,125 00
	$13,904,584 19	$18,267,537 32

MALT

No. 10—Comparative Statement of Manufactures for the Fiscal Years ended March 31, 1927 and 1928

Provinces	Licenses		Grain Steeped	Grain Used in Malt Manufactured	Malt			Total Duty Collected Ex-Manufactory including License Fees
	No.	Fees			Manufactured	Paid Duty	Warehoused	
1927		$	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	$ cts.
Ontario	4	750	.....	.....	.....	.....	.....	750 00
Quebec	2	400	49,225,800	49,061,600	39,716,700	.....	39,716,700	400 00
Manitoba	1	200	71,285,900	69,274,700	58,698,330	.....	58,698,330	200 00
Alberta	1	200	22,076,400	22,076,400	18,294,210	.....	18,294,210	200 00
British Columbia	2	250	1,331,060	1,357,980	1,071,714	1,050,770	20,944	31,773 10
Totals	**10**	**1,800**	**143,919,160**	**141,770,680**	**117,780,954**	**1,050,770**	**116,730,184**	**33,323 10**
1928								
Ontario	4	750	6,240,580	5,950,180	5,039,890	.....	5,039,890	750 00
Quebec	2	500	43,303,000	43,682,200	35,488,435	.....	35,488,435	500 00
Manitoba	1	300	74,513,600	72,206,000	61,959,062	.....	61,959,062	300 00
Alberta	1	300	51,157,790	50,946,590	41,614,850	.....	41,614,850	300 00
British Columbia	2	250	2,054,791	2,054,791	1,733,000	383,490	1,349,510	11,754 70
Totals	**10**	**2,100**	**177,269,761**	**174,839,761**	**145,835,237**	**383,490**	**145,451,747**	**13,604 70**

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MALT

Dr. No. 11—Comparative Statement of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928 Cr.

Provinces	Remaining in Warehouse from last year	Warehoused	Increase	Received from other Ports		Imported	Totals	Entered for Consumption		Removed to other Ports		Exported	Free	Remaining in Warehouse	Totals
				Removed during year	In Transit last year			Quantity	Duty	Warehoused in Ports to which Removed	In Transit				
1927	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	$ cts.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Ontario	1,568,218	.....	36,488	21,663,680	411,860	18,499,868	42,130,114	27,754,857	834,626 21	.....	.....	59,080	12,455,765	1,860,412	42,130,114
Quebec	6,839,585	39,716,700	326,454	30,815,632	701,600	1,025,596	79,425,567	63,971,942	1,919,578 66	1,775,850	2,160	5,924,704	3,781,982	3,968,929	79,425,567
New Brunswick	57,302	.....	205	1,084,700	54,000	3,960	1,200,167	1,200,167	36,005 01	.....	.....	.....	.....	.....	1,200,167
Nova Scotia	22,000	.....	.....	381,500	.....	.....	403,500	401,500	12,045 00	.....	.....	.....	.....	2,000	403,500
Manitoba	11,896,318	58,698,330	268,138	5,292,500	284,580	914,236	77,354,102	10,223,868	306,623 34	57,688,162	995,160	320,900	741,957	7,384,055	77,354,102
Saskatchewan	.....	.....	.....	3,431,940	.....	.....	3,431,940	3,431,940	102,958 20	.....	.....	.....	.....	.....	3,431,940
Alberta	7,521,870	18,294,210	750	14,646,260	100,000	.....	40,563,090	11,255,860	336,144 90	25,267,040	1,438,800	.....	23,680	2,577,710	40,563,090
B. Columbia	481,400	20,944	3,984	7,435,784	40,000	1,254,272	9,236,384	7,677,072	230,252 16	20,944	.....	.....	1,414,352	124,016	9,236,384
Totals	**28,386,693**	**116,730,184**	**636,019**	**84,751,996**	**1,592,049**	**21,647,932**	**253,744,864**	**125,917,296**	**3,778,233 48**	**84,751,996**	**2,436,120**	**6,304,684**	**18,417,736**	**15,917,122**	**253,744,864**
1928															
Ontario	1,860,412	5,039,890	288,674	30,013,770	780,320	27,209,941	65,193,007	39,583,994	1,184,483 92	954,214	.....	278,933	20,376,339	3,999,527	65,193,007
Quebec	3,968,929	35,488,435	241,884	42,238,124	1,278,000	1,924,575	85,139,947	68,109,575	2,043,287 25	2,564,790	2,400	2,522,604	7,586,663	4,353,915	85,139,947
New Brunswick	.....	.....	403	703,500	109,000	5,940	818,843	762,843	22,885 29	.....	.....	.....	.....	56,000	818,843
Nova Scotia	2,000	.....	.....	489,200	54,000	.....	545,200	505,200	15,156 00	.....	.....	.....	.....	40,000	545,200
Manitoba	7,384,055	61,959,062	209,705	2,200,800	.....	868,578	72,622,200	10,358,076	310,834 98	55,838,880	1,875,820	472,545	169,710	3,907,169	72,622,200
Saskatchewan	.....	.....	.....	3,645,200	.....	109,954	3,755,254	3,755,254	112,657 62	.....	.....	.....	.....	.....	3,755,254
Alberta	2,577,710	41,614,850	107,440	5,472,200	164,800	492,182	50,429,182	11,014,147	331,955 31	33,155,345	1,524,000	.....	48,520	4,687,170	50,429,182
B. Columbia	124,016	1,349,510	34	8,575,570	50,000	2,074,859	12,173,989	8,071,368	242,201 04	825,235	.....	.....	2,867,375	410,011	12,173,989
Totals	**15,917,122**	**145,451,747**	**848,149**	**93,338,464**	**2,436,120**	**32,686,029**	**290,677,622**	**142,169,457**	**4,263,461 41**	**93,338,464**	**3,402,220**	**3,274,082**	**31,048,607**	**17,453,792**	**290,677,622**

	1927	1928
Total duty collected ex-manufactory and ex-warehouse	$ 3,809,756 58	$ 4,274,966 11
License fees	1,800 00	2,100 00
	$ 3,811,556 58	$ 4,277,066 11

MALT LIQUOR

No. 12—Comparative Statement of Manufactures for the Fiscal Years ended March 31, 1927 and 1928

Provinces	Licenses		Malt Used	Other Commodities Used	Malt Liquor Manufactured	Malt Liquor Exported	Total Duty Collected ex-Manufactory including License Fees
	No.	Fees					
1927		$	Lbs.	Lbs.	Gals.	Gals.	$ cts.
Ontario	32	1,600	24,193,974	443,305	10,597,252	1,170	1,600 00
Quebec	10	500	62,645,510	191,400	28,276,040	10,766	500 00
New Brunswick	2	100	1,184,910	.....	417,200	324	100 00
Nova Scotia	2	100	396,500	.....	129,000	7,659	100 00
Manitoba	10	525	8,716,354	69,149	3,561,494	.....	26,227 95
Saskatchewan	4	150	3,467,520	.....	1,400,342	.....	150 00
Alberta	6	300	10,592,425	10,500	4,207,684	.....	300 00
British Columbia	18	850	8,626,786	27,156	3,166,828	9,537	1,062 10
Totals	**84**	**4,125**	**119,823,979**	**741,510**	**51,755,840**	**29,456**	**30,040 05**
1928							
Ontario	37	2,200	37,018,235	633,259	14,947,123	585	30,649 90
Quebec	9	500	66,132,931	209,000	30,112,501	10,152	500 00
New Brunswick	2	100	777,782	.....	287,617	.....	100 00
Nova Scotia	2	100	537,500	.....	179,525	4,143	100 00
Manitoba	8	550	8,518,870	7,200	3,539,643	.....	2,200 75
Saskatchewan	5	225	3,997,129	.....	1,503,687	.....	225 00
Alberta	6	450	10,612,880	55,000	4,526,506	.....	450 00
British Columbia	15	900	8,531,833	34,794	3,301,311	10,029	3,421 50
Totals	**84**	**5,025**	**136,127,160**	**939,253**	**58,397,913**	**24,909**	**37,647 15**

	1927 gals.	1928 gals.
Exported	23,993	21,029
Ship Stores	5,463	3,880
	29,456	24,909

MALT LIQUOR

No. 13.—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928

Balance in Warehouse	Warehoused	Totals	Provinces	Exported	Entered for Consumption		Remaining in Warehouse	Totals
					Quantity	Duty Paid		
Gals.	Gals.	Gals.	1927	Gals.	Gals.	$ cts.	Gals.	Gals.
47,880	704,214	752,094	Ontario	.....	736,824	110,523 60	15,270	752,094
24,041	393,990	418,031	Quebec	9,672	388,885	58,332 75	19,474	418,031
.....	161,195	161,195	Alberta	.....	161,195	24,179 25	.....	161,195
13,092	32,688	45,780	British Columbia	9,699	5,050	757 50	31,031	45,780
85,013	**1,292,087**	**1,377,100**	**Totals**	**19,371**	**1,291,954**	**193,793 10**	**65,775**	**1,377,100**
			1928					
15,270	775,695	790,965	Ontario	.....	782,721	117,408 15	8,244	790,965
19,474	471,150	490,624	Quebec	3,168	473,575	71,036 25	13,881	490,624
.....	78,785	78,785	Alberta	.....	78,785	11,817 75	.....	78,785
31,031	.....	31,031	British Columbia	10,029	8,905	1,335 75	12,097	31,031
65,775	**1,325,630**	**1,391,405**	**Totals**	**13,197**	**1,343,986**	**201,597 90**	**34,222**	**1,391,405**

	1927	1928
Total duty accrued ex-manufactory and ex-warehouse	$219,708 15	$234,220 05
License fees	4,125 00	5,025 00
	$223,833 15	$239,245 05

TOBACCO

No. 14.—Comparative Statement of Manufactures

Provinces	Licenses		Total Weight of Raw Leaf Tobacco and other materials actually used	Tobacco		
	No.	Fees		Produced	Paid Duty	Warehoused
1927		$ cts.	Lbs.	Lbs.	Lbs.	Lbs.
Ontario	9	450 00	1,771,970	952,274	743,525	208,749
Quebec	39	1,925 00	25,613,941½	19,762,307	17,619,277	2,143,030
Nova Scotia	1	50 00	.....	.....	.....	.....
Prince Edward Island	3	150 00	170,160	184,149	184,149	.....
Manitoba	2	100 00	13,593	12,276	12,276	.....
British Columbia	2	100 00	21,323½	22,957	22,957	.....
Totals	**56**	**2,775 00**	**27,590,988**	**20,933,963**	**18,582,184**	**2,351,779**
1928						
Ontario	10	500 00	2,002,085	977,205	794,590	182,615
Quebec	41	2,000 00	27,674,852	19,991,847	18,442,296	1,549,551
Prince Edward Island	3	150 00	177,994	190,072	190,072	.....
Manitoba	2	75 00	12,186	11,725	11,725	.....
British Columbia	2	100 00	17,159	17,684	17,684	.....
Totals	**58**	**2,825 00**	**29,884,276**	**21,188,533**	**19,456,367**	**1,732,166**

TOBACCO

for the Fiscal Years ended March 31, 1927 and 1928

Cigarettes			Cigarettes, Overweight			Snuff			Total Duty Collected ex-Manufactory (including License Fees)
Produced	Paid Duty	Warehoused	Produced	Paid Duty	Warehoused	Produced	Paid Duty	Warehoused	
No.	No.	No.	No.	No.	No.	Lbs.	Lbs.	Lbs.	$ cts.
361,119,860	358,473,760	2,646,100	57,900	57,900	.....	.....	.....	.....	2,300,634 36
2,950,990,950	2,843,421,950	107,569,000	1,382,400	1,382,300	100	854,057	854,047	10	20,772,326 90
.....	.....	.....	.....	.....	.....	.....	.....	.....	50 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	36,979 80
.....	.....	.....	.....	.....	.....	570	570	.....	2,669 20
.....	.....	.....	.....	.....	.....	.....	.....	.....	4,691 50
3,312,110,810	**3,201,895,710**	**110,215,100**	**1,440,300**	**1,440,200**	**100**	**854,627**	**854,617**	**10**	**23,117,351 76**
447,481,320	446,005,470	1,475,850	50,350	50,350	.....	.....	.....	.....	2,836,004 65
3,557,506,855	3,312,787,105	244,719,750	1,459,550	1,341,550	118,000	945,132	945,105	27	23,770,959 91
.....	.....	.....	.....	.....	.....	.....	.....	.....	38,164 40
.....	.....	.....	.....	.....	.....	525	525	.....	2,525 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	3,636 80
4,004,988,175	**3,758,792,575**	**246,195,600**	**1,509,900**	**1,391,900**	**118,000**	**945,657**	**945,630**	**27**	**26,651,290 76**

TOBACCO—MANUFACTURED BEFORE JUNE 1, 1908

No. 15—Comparative Statement of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928

Dr. Remaining in warehouse from last year	Dr. Totals	Provinces	Cr. Remaining in warehouse	Cr. Totals
Lbs.	Lbs.	1927	Lbs.	Lbs.
461	461	New Brunswick	461	461
19,719½	19,719½	Sundries	19,719½	19,719½
20,180½	**20,180½**	**Totals**	**20,180½**	**20,180½**
		1928		
461	461	New Brunswick	461	461
19,719½	19,719½	Sundries	19,719½	19,719½
20,180½	**20,180½**	**Totals**	**20,180½**	**20,18.½**

TOBACCO

DR. No. 16—WAREHOUSE RETURN for the Fiscal Year ended March 31, 1928 DR.

Ports	Remaining in Warehouse from last year			Warehoused			Received from other Ports			Totals		
							Removed during year		In transit last year			
	Tobacco	Cigarettes	Overweight cigarettes	Tobacco	Cigarettes	Snuff	Tobacco	Cigarettes	Cigarettes	Tobacco	Cigarettes	Snuff
	Lbs.	No.	No.	Lbs.	No.	Lbs.	Lbs.	No.	No.	Lbs.	No.	Lbs.
Hamilton, Ont.	10,937½	...	...	182,615	1,475,850	...	...	...	...	193,552½	1,475,850	...
Ottawa, Ont.	...	...	...	...	...	...	16	125,500	...	16	125,500	...
Ontario	10,937½	...	...	182,615	1,475,850	...	16	125,500	...	193,568½	1,601,350	...
Montreal, Que.	29,818	8,139,900	...	1,529,389	244,717,250	27	...	371,450	...	1,559,207	253,228,600	27
Granby, Que.	...	...	...	6,510	...	...	...	...	...	6,510	...	...
Quebec, Que.	9,360	602,100	...	13,652	120,500	...	...	...	...	23,012	722,600	...
Quebec	39,178	8,742,000	...	1,549,551	244,837,750	27	...	371,450	...	1,588,729	253,951,200	27
St. John, N.B.	...	197,500	...	...	...	...	25	440,000	...	25	637,500	...
Halifax, N.S.	...	244,000	...	...	...	...	...	1,255,600	...	...	1,499,600	...
Truro, N.S.	9,729	...	...	...	...	...	...	...	...	9,729	...	...
Nova Scotia	9,729	244,000	...	...	...	...	...	1,255,600	...	9,729	1,499,600	...
Vancouver, B.C.	...	316,650	...	...	...	...	604	1,537,000	10,000	604	1,863,650	...
Totals	**59,844½**	**9,500,150**	...	**1,732,166**	**246,313,600**	**27**	**645**	**3,729,550**	**10,000**	**1,792,655½**	**259,553,300**	**27**

TOBACCO

CR. No. 16—WAREHOUSE RETURN for the Fiscal Year ended March 31, 1928—*Continued* CR.

Ports	Entered for Consumption				Removed to other Ports				Exported	
	Tobacco	Cigarettes	Over-weight cigar-ettes	Duty	Warehoused in Ports in which removed		In Transit		Tobacco	Cigar-ettes
					Tobacco	Cigar-ettes	Cigar-ettes	Tobacco		
	Lbs.	No.	No.	$ cts.	Lbs.	No.	No.	Lbs.	Lbs.	No.
Hamilton, Ont.	13,243	.....	.....	2,648 60	504	1,016,850	.....	.....	172,324	459,000
Ottawa, Ont.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ontario	13,243	.....	.....	2,648 60	504	1,016,850	.....	.....	172,324	459,000
Montreal, Que.	1,478,739	166,618,850	.....	1,296,008 44	41	2,505,600	400,000	9	20,796	2,477,500
Granby, Que.	.....	.....	.....	.....	100	.....	.....	.....	6,100	.....
Quebec, Que.	13,768	219,000	.....	4,067 60	.....	.....	.....	.....	1,244	.....
Quebec	1,492,507	166,837,850	.....	1,300,076 04	141	2,505,600	400,000	9	28,140	2,477,500
St. John, N.B.	.....	.....	.....	.....	.....	147,500	.....	.....	.....	.....
Halifax, N.S.	.....	.....	.....	.....	.....	40,000	48,000	.....	.....	.....
Truro, N.S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nova Scotia	.....	.....	.....	.....	.....	40,000	48,000	.....	.....	.....
Vancouver, B.C.	.....	.....	.....	.....	.....	19,600	.....	.....	.....	.....
Totals	**1,505,750**	**166,837,850**	.....	**1,302,724 64**	**645**	**3,729,550**	**448,000**	**9**	**200,464**	**2,936,500**

TOBACCO

Cr. No. 16—Warehouse Return for the Fiscal Year ended March 31, 1928—*Concluded* Cr.

Ports	Ship's Stores			Written off		Taken for Re-working			Remaining in Warehouse		Totals		
	Tobacco	Cigarettes	Snuff	Tobacco	Cigarettes	Tobacco	Cigarettes	Overweight cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Snuff
	Lbs.	No.	Lbs.	Lbs.	No.	Lbs.	No.	No.	Lbs.	No.	Lbs.	No.	Lbs.
Hamilton, Ont.	.....	.....	.....	.....	.....	800½	.....	.....	6,681	.....	193,552½	1,475,850	.....
Ottawa, Ont.	.....	.....	.....	16	125,500	.....	.....	.....	.....	.....	16	125,500	.....
Ontario	.....	.....	.....	16	125,500	800½	.....	.....	6,681	.....	193,668½	1,601,350	.....
Montreal, Que.	577	5,032,900	27	.....	.....	7,300	19,600	.....	51,745	76,174,150	1,559,207	253,228,600	27
Granby, Que.	114	.....	.....	.....	.....	196	.....	.....	.....	.....	6,510	.....	.....
Quebec, Que.	.....	.....	.....	.....	.....	.....	.....	.....	8,000	503,600	23,012	722,600	.....
Quebec	691	5,032,900	27	.....	.....	7,496	19,600	.....	59,745	76,677,750	1,588,729	253,951,200	27
St. John, N.B.	.....	432,500	.....	.....	.....	.....	.....	.....	25	57,500	25	637,500	.....
Halifax, N.S.	.....	1,277,600	.....	.....	.....	.....	.....	.....	.....	134,000	.....	1,499,600	.....
Truro, N.S.	.....	.....	.....	9,729	.....	.....	.....	.....	.....	.....	9,729	.....	.....
Nova Scotia	.....	1,277,600	.....	9,729	.....	.....	.....	.....	.....	134,000	9,729	1,499,600	.....
Vancouver, B.C.	10	1,258,100	.....	.....	.....	432	.....	.....	162	585,950	604	1,863,650	.....
Totals	**701**	**8,001,100**	**27**	**9,745**	**125,500**	**8,728½**	**19,600**	.....	**66,613**	**77,455,200**	**1,792,655½**	**259,553,300**	**27**

TOBACCO

DR. No. 17—COMPARATIVE STATEMENT of Warehouse Returns

Provinces	Remaining in Warehouse from last Year			Warehoused			
	Tobacco	Cigarettes	Over weight Cigarettes	Tobacco	Cigarettes	Over weight Cigarettes	Snuff
1927	Lbs.	No.	No.	Lbs.	No.	No.	Lbs.
Ontario	14,509	638,350	.....	208,749¼	2,646,100	.....	.....
Quebec	106,596	44,237,000	800	2,143,030	107,569,000	100	10
New Brunswick	.....	.....	.....	.....	.....	.....	.....
Nova Scotia	9,729	36,350	.....	.....	.....	.....	.....
British Columbia	.....	236,050	1,500	.....	.....	.....	.....
Totals	**130,834**	**45,147,750**	**2,300**	**2,351,779¼**	**110,215,100**	**100**	**10**
1928							
Ontario	10,937½	.....	.....	182,615	1,475,850	.....	.....
Quebec	39,178	8,742,000	.....	1,549,551	244,837,750	.....	27
New Brunswick	.....	197,500	.....	.....	.....	.....	.....
Nova Scotia	9,729	244,000	.....	.....	.....	.....	.....
British Columbia	.....	316,650	.....	.....	.....	.....	.....
Totals	**59,844½**	**9,500,150**	.....	**1,732,166**	**246,313,600**	.....	**27**

TOBACCO

for the Fiscal Years ended March 31, 1927 and 1928

Received from other Ports			Totals			
Tobacco	Cigarettes		Tobacco	Cigarettes	Over-weight Cigar-ettes	Snuff
Removed during year	Removed during year	In Transit last year				
Lbs.	No.	No.	Lbs.	No.	No.	Lbs.
.....	193,400	5,000	223,258¼	3,482,850	.....	.....
.....	1,108,500	.....	2,249,626	152,914,500	900	10
60	712,000	.....	60	712,000	.....	.....
60	1,381,000	.....	9,789	1,417,350	.....	.....
.....	1,168,000	.....	.....	1,404,050	1,500	.....
120	**4,562,900**	**5,000**	**2,482,733¼**	**159,930,750**	**2,400**	**10**
16	125,500	.....	193,568½	1,601,350	.....	.....
.....	371,450	.....	1,588,729	253,951,200	.....	27
25	440,000	.....	25	637,500	.....	.....
.....	1,255,600	.....	9,729	1,499,600	.....	.....
604	1,537,000	10,000	604	1,863,650	.....	.....
645	**3,729,550**	**10,000**	**1,792,655½**	**259,553,300**	.....	**27**

TOBACCO

Dr. No. 17—Comparative Statement of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928 Cr.
—*Continued*

Provinces	Entered for Consumption				Removed to Other Divisions				Exported		
					Tobacco		Cigarettes				
	Tobacco	Cigarettes	Over-weight Cigar-ettes	Duty	Ware-housed in ports to which removed	In Transit	Ware-housed in ports to which removed	In Transit	Tobacco	Cigarettes	Snuff
1927	Lbs.	No.	No.	$ cts.	Lbs.	Lbs.	No.	No.	Lbs.	No.	Lbs.
Ontario	23,203	638,350	.....	8,470 70	.....	.....	1,930,500	10,000	188,885¾	773,600	.....
Quebec	2,129,728½	130,024,700	900	1,206,103 80	60	.....	2,265,400	.....	64,794½	7,368,400	10
New Brunswick	.....	.....	.....	.....	.....	.....	100,000	.....	.....	.....	.....
Nova Scotia	.....	.....	.....	.....	60	.....	267,000	.....	.....	.....	.....
British Columbia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	**2,152,931½**	**130,663,050**	**900**	**1,214,574 50**	**120**	.....	**4,562,900**	**10,000**	**253,680¼**	**8,142,000**	**10**
1928											
Ontario	13,243	.....	.....	2,648 60	504	.....	1,016,850	.....	172,324	459,000	.....
Quebec	1,492,507	166,837,850	.....	1,300,076 04	141	9	2,505,600	400,000	28,140	2,477,500	.....
New Brunswick	.....	.....	.....	.....	.....	.....	147,500	.....	.....	.....	.....
Nova Scotia	.....	.....	.....	.....	.....	.....	40,000	48,000	.....	.....	.....
British Columbia	.....	.....	.....	.....	.....	.....	19,600	.....	.....	.....	.....
Totals	**1,505,750**	**166,837,850**	.....	**1,302,724 64**	**645**	**9**	**3,729,550**	**448,000**	**200,464**	**2,936,500**	.....

TOBACCO

DR. No. 17—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928 CR.
—*Concluded*

Provinces	Ship's Stores			Written off		Taken for Reworking		Remaining in Warehouse			Totals			
	Tobacco	Cigarettes	Snuff	Tobacco	Cigarettes	Tobacco	Cigarettes	Tobacco	Cigarettes	Overweight Cigarettes	Tobacco	Cigarettes	Overweight Cigarettes	Snuff
1927	Lbs.	No.	Lbs.	Lbs.	No.	Lbs.	No.	Lbs.	No.	No.	Lbs.	No.	No.	Lbs.
Ontario	.....	.....	.....	.....	126,000	232	4,400	10,937½	.....	.....	223,258¼	3,482,850	.....	.....
Quebec	393	4,491,500	.....	.....	.....	15,472	22,500	39,178	8,742,000	.....	2,249,626	152,914,500	900	10
New Brunswick	60	414,500	.....	.....	.....	.....	.....	.....	197,500	.....	60	712,000	.....	.....
Nova Scotia	.....	906,350	.....	.....	.....	.....	.....	9,729	244,000	.....	9,789	1,417,350	.....	.....
British Columbia	.....	1,088,900	.....	.....	.....	.....	.....	.....	315,150	1,500	.....	1,404,050	1,500	.....
Totals	**453**	**6,901,250**	.....	.....	**126,000**	**15,704**	**26,900**	**59,844½**	**9,498,650**	**1,500**	**2,482,733¼**	**159,930,750**	**2,400**	**10**
1928														
Ontario	.....	.....	.....	16	125,500	800½	.....	6,681	.....	.....	193,668½	1,601,350	.....	.....
Quebec	691	5,032,900	27	.....	.....	7,496	19,600	59,745	76,677,750	.....	1,588,729	253,951,200	.....	27
New Brunswick	.....	432,500	.....	.....	.....	.....	.....	25	57,500	.....	25	637,500	.....	.....
Nova Scotia	.....	1,277,600	.....	9,729	.....	.....	.....	.....	134,000	.....	9,729	1,499,600	.....	.....
British Columbia	10	1,258,100	.....	.....	.....	432	.....	162	585,950	.....	604	1,863,650	.....	.....
Totals	**701**	**8,001,100**	**27**	**9,745**	**125,500**	**8,728½**	**19,600**	**66,613**	**77,455,200**	.....	**1,792,655½**	**259,553,300**	.....	**27**

RAW LEAF TOBACCO, INCLUDING

DR. No. 18—COMPARATIVE STATEMENT of Warehouse

Remaining in warehouse from last year	Imported	Warehoused ex factory	Received from other Ports: Removed during year	Received from other Ports: In transit last year	Totals	Provinces
std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	
2,660,053	1,853,357	2,673	2,648	.....	4,518,731	Ontario.....
7,406,378½	14,897,282¼	24½	357,013½	320	22,661,018¾	Quebec.....
364	1,305	.....	150	.....	1,819	New Brunswick.....
23,261	1,416	.....	257	.....	24,934	Nova Scotia.....
5,654	.....	.....	.....	.....	5,654	Prince Edward Island.....
6,868	13,375	.....	.....	.....	20,243	Manitoba.....
.....	40	.....	.....	.....	40	Saskatchewan.....
1,755½	802	.....	297	.....	2,854½	Alberta.....
12,957	15,217	.....	547	.....	28,721	British Columbia.....
10,117,291	**16,782,794¼**	**2,697½**	**360,912½**	**320**	**27,264,015¼**	**Totals**.....
						1928
2,580,932½	2,023,137	7	10,257	.....	4,614,333½	Ontario.....
8,721,459¾	15,622,991	10	484,677	7,527½	24,836,665¼	Quebec.....
415	1,034	.....	415	.....	1,864	New Brunswick.....
23,826	1,687	.....	.....	.....	25,513	Nova Scotia.....
5,477	.....	.....	.....	.....	5,477	Prince Edward Island.....
7,611	12,410	.....	2,203	.....	22,224	Manitoba.....
.....	21	.....	.....	.....	21	Saskatchewan.....
377	463	.....	218	.....	1,058	Alberta.....
6,244	21,170	.....	376	.....	27,790	British Columbia.....
11,346,342¼	**17,682,913**	**17**	**498,146**	**7,527½**	**29,534,945¾**	**Totals**.....

STEMS, SCRAPS AND CUTTINGS

Returns for the Fiscal Years ended March 31, 1927 and 1928 CR.

Entered for Consumption		Removed to other Ports		Exported	Destroyed	Remaining in warehouse	Totals
Quantity	Duty	Warehoused in Ports to which removed	In Transit				
std. lbs.	$ cts.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.	std. lbs.
1,783,429½	745,169 80	137,499	.....	15,290	1,580	2,580,932½	4,518,731
13,666,239¾	5,538,203 00	223,239½	7,527½	32,132½	10,419¾	8,721,459¾	22,661,018¾
1,404	561 60	.....	.....	.....	.....	415	1,819
1,108	463 20	.....	.....	.....	.....	23,826	24,934
177	70 80	.....	.....	.....	.....	5,477	5,654
12,632	4,851 80	.....	.....	.....	.....	7,611	20,243
40	16 00	.....	.....	.....	.....	.....	40
2,477½	963 00	.....	.....	.....	.....	377	2,854½
22,303	10,789 40	174	.....	.....	.....	6,244	28,721
15,489,810¾	**6,301,088 60**	**360,912½**	**7,527½**	**47,422½**	**11,999¾**	**11,346,342¼**	**27,264,015¼**
1,963,700	827,483 20	154,952	277	4,327	2,570½	2,488,507	4,614,333½
14,538,218	5,898,822 15	342,976	2	11,346	7,245¼	9,936,878	24,836,665¼
1,445	586 00	.....	.....	.....	.....	419	1,864
1,177	473 60	.....	.....	.....	23,171	1,165	25,513
.....	.....	.....	.....	.....	.....	5,477	5,477
11,563	4,868 60	.....	.....	.....	.....	10,661	22,224
21	8 40	.....	.....	.....	.....	.....	21
567	318 40	218	.....	.....	.....	273	1,058
22,787	11,052 60	.....	.....	.....	66	4,937	27,790
16,539,478	**6,743,612 95**	**498,146**	**279**	**15,673**	**33,052¾**	**12,448,317**	**29,534,945¾**

CIGARS

No. 19—Comparative Statement of Manufactures for the Fiscal Years ended March 31, 1927 and 1928

Provinces	Licenses		Total Raw Leaf Tobacco and other materials actually used	Deficiencies Paying Duty	Cigars at $3.00 per Thousand			Cigars at $4.00 per Thousand			Total Duty collected ex-manufactory, including License Fees
	No.	Fees		Cigars	Manufactured	Paid duty	Warehoused	Manufactured	Paid Duty	Warehoused	
1927		$	Lbs.	No.	No.	No.	No.	No.	No.	No.	$ cts.
Ontario	40	1,975	802,473	11,122	38,449,830	34,430,055	4,019,775	1,097,380	1,097,380	.....	109,689 46
Quebec	47	2,300	2,367,744	35,315	128,546,986	42,484,436	86,062,550	4,498,380	2,607,210	1,891,170	140,288 37
New Brunswick	1	50	4,637	.....	259,130	246,380	12,750	.....	.....	.....	789 14
Nova Scotia	1	50	3,064	.....	182,650	75,450	107,200	.....	.....	.....	276 35
Manitoba	3	125	2,744	.....	152,725	152,725	.....	.....	.....	.....	583 18
Saskatchewan	1	50	162	945	7,000	7,000	.....	.....	.....	.....	73 84
Alberta	2	100	3,070	.....	162,900	162,900	.....	.....	.....	.....	588 70
British Columbia	11	550	44,056	8,045	2,076,475	2,075,475	1,000	.....	.....	.....	6,800 58
Totals	**106**	**5,200**	**3,227,950**	**55,427**	**169,837,696**	**79,634,421**	**90,203,275**	**5,595,760**	**3,704,590**	**1,891,170**	**259,089 62**
1928											
Ontario	32	1,600	838,992	45,569	40,467,750	39,178,975	1,288,775	.....	.....	.....	119,276 19
Quebec	43	2,150	2,545,755	14,267	137,419,974	45,787,939	91,632,035	.....	.....	.....	139,556 83
New Brunswick	1	50	4,341	.....	254,190	219,940	34,250	.....	.....	.....	709 82
Nova Scotia	1	50	3,290	.....	200,975	79,550	121,425	.....	.....	.....	288 65
Manitoba	2	100	3,586	.....	189,580	189,580	.....	.....	.....	.....	668 74
Saskatchewan	1	50	63	364	3,150	3,150	.....	.....	.....	.....	60 54
Alberta	1	50	1,682	.....	89,250	89,250	.....	.....	.....	.....	317 75
British Columbia	9	450	48,879	6,734	2,199,550	2,195,550	4,000	.....	.....	.....	7,056 83
Totals	**90**	**4,500**	**3,446,588**	**66,934**	**180,824,419**	**87,743,934**	**93,080,485**	.....	.....	.....	**267,935 35**

69160—7½

CIGARS

DR. No. 20—COMPARATIVE STATEMENT of Warehouse Returns for the Fiscal Years ended March 31, 1927 and 1928 CR.

Remaining in Warehouse from last year	Warehoused	Received from other Ports: Removed during the year	Received from other Ports: In Transit last year	Totals	Provinces	Entered for Consumption: Quantity	Entered for Consumption: Duty	Removed to other Ports: Warehoused in Ports to which removed	Removed to other Ports: In Transit	Exported	Free	Re-packed	Remaining in Warehouse	Totals
No.	No.	No.	No.	No.	1927	No.	$ cts.	No.	No.	No.	No.	No.	No.	No.
2,910,315	4,019,775	3,400	.....	6,933,490	Ontario.....	5,882,615	17.647 85	.....	.....	.....	9,375	.....	1,041,500	6,933,490
11,482,410	87,953,720	6,353,050	655,650	106,444,830	Quebec.....	85,918,025	259,684 63	6,360,950	528,700	83,900	.....	10,000	13,543,255	106,444,830
13,260	12,750	.....	.....	26,010	New Brunswick.	26,010	78 83	.....	.....	.....	.....	.....	.....	26,010
31,350	107,200	.....	.....	138,550	Nova Scotia.....	114,750	344 25	.....	.....	.....	.....	.....	23,800	138,550
400	1,000	4,500	.....	5,900	British Columbia	.....	.....	.....	.....	4,600	.....	.....	1,300	5,900
14,437,735	**92,094,445**	**6,360,950**	**655,650**	**113,548,780**	....**Totals**.....	**91,941,400**	**277,755 56**	**6,360,950**	**528,700**	**88,500**	**9,375**	**10,000**	**14,609,855**	**113,548,780**
					1928									
1,041,500	1,288,775	3,750	.....	2,334,025	Ontario.....	1,461,500	4,384 50	.....	.....	.....	3,750	.....	868,775	2,334,025
13,543,255	91,632,035	7,207,350	528,700	112,911,340	Quebec.....	92,368,830	277,106 61	7,217,600	221,250	101,015	.....	.....	13,002,645	112,911,340
.....	34,250	.....	.....	34,250	New Brunswick.	31,600	94 80	.....	.....	.....	.....	.....	2,650	34,250
23,800	121,425	.....	.....	145,225	Nova Scotia.....	124,750	374 25	.....	.....	.....	.....	.....	20,475	145,225
1,300	4,000	6,500	.....	11,800	British Columbia	.....	.....	.....	.....	6,450	.....	.....	5,350	11,800
14,609,855	**93,080,485**	**7,217,600**	**528,700**	**115,436,640**	....**Totals**.....	**93,986,680**	**281,960 16**	**7,217,600**	**221,250**	**107,465**	**3,750**	.....	**13,899,895**	**115,436,640**
											1927		1928	

	1927	1928
Total duty accrued ex-manufactory and ex-warehouse.....	$ 531,645 18	$ 545,395 51
License fees.....	5,200 00	4,500 00
	$ 536,845 18	$ 549,895 51

INSPECTION OF PETROLEUM

No. 21—Comparative Statement of Inspected Petroleum and Naphtha shipped from Refineries during the Fiscal Years ended March 31, 1927 and 1928

Provinces	Licenses		Petroleum	Naphtha	Totals
	No.	Fees			
1927		$	Gals.	Gals.	Gals.
Ontario	5	7	39,100,346·05	89,174,857·00	128,275,203·05
Quebec	2	2	6,349,547·00	48,820,163·00	55,169,710·00
Nova Scotia	1	1	13,194,691·00	25,934,150·00	39,128,841·00
Saskatchewan	1	1	7,947,702·00	23,767,561·00	31,715,263·00
Alberta	9	9	22,562,770·00	35,392,082·00	57,954,852·00
British Columbia	3	3	1,855,454·50	24,330,512·00	26,185,966·50
Totals	**21**	**23**	**91,010,510·55**	**247,419,325·00**	**338,429,835·55**
1928					
Ontario	5	5	37,305,789·88	110,415,372·15	147,721,162·03
Quebec	2	2	4,965,797·00	62,675,955·00	67,641,752·00
Nova Scotia	1	1	12,019,448·00	39,733,468·00	51,752,916·00
Manitoba	1	1	25,200·00	69,472·00	94,672·00
Saskatchewan	1	1	8,212,213·00	30,151,001·00	38,363,214·00
Alberta	9	9	12,272,986·00	43,209,967·00	55,482,953·00
British Columbia	3	3	5,278,321·50	33,387,350·50	38,665,672·00
Totals	**22**	**22**	**80,079,755·38**	**319,642,585·65**	**399,722,341·03**

No. 22—STATEMENT showing the number of parties under Licenses for the year 1927-28

Ports	Distillers	Manufacturers in Bond	Bonding Warehouses	Cigar Manufacturers	Tobacco Manufacturers	Brewers and Maltsters	Chemical Stills	Wood Alcohol Mfrs.	Petroleum Refiners	Manufacturers of Stills	Importers of Stills	Malt Vinegar Brewers	Can. leaf. stemmers	Acetic Acid	Compounders
Amherstburg		1			1								4		
Belleville	2					1									
Brantford		2				1	2								
Chatham		1											2		
Cobourg		2					1								
Collingwood							1								
Cornwall		1				1	1								
Fort Frances						1					1				
Fort William			1			1									
Guelph		1				4	1								
Hamilton		6	1	4	3	3	4				2			1	
Kenora						1									
Kingston		2				1	1								
Kitchener	1	1		2		2	3				1				
Lindsay	1							2							
London		8	1	9	2	2	7				2				
Niagara Falls		1		1											
North Bay							1								
Oshawa							1								
Ottawa		5	1		1	2	7								
Owen Sound				1											
Peterborough		1					1								
Port Arthur						1									
Port Hope		1					1								
Prescott	1	1													
Sarnia	1					1	1		2						
Sault Ste. Marie				1		1									
Simcoe							1								
Stratford				1		1	2								
Sudbury						1									
St. Catharines				2		1									
St. Thomas		1		2									1		
Toronto	1	105	11	8	2	8	35		3	1	6	1			1
Wallaceburg					1								1		
Welland				1		1									
Whitby								1							
Windsor	1	13				5	6				1				
Woodstock		1													
Ontario	8	154	15	32	10	40	77	3	5	1	13	1	8	1	1
Chicoutimi		2		1											
Granby			5	3	1										
Hull							2	1							
Montreal	6	95	13	33	33	7	23	2	2	3	4			1	1
Quebec		17	2	1	4	2	4								
Shawinigan Falls		1					1							1	
Sherbrooke		5		3		1	2								
Sorel	1														
St. Hyacinthe	1			1			1				1		1		
St. John's		1		1	1		1								
Sutton		1													
Three Rivers		2			2		1								
Valleyfield		2				1									
Quebec	8	126	20	43	41	11	35	3	2	3	5		1	2	1

No. 22—STATEMENT showing the number of parties under Licenses for the year 1927-28—*Concluded*

Ports	Distillers	Manufacturers in Bond	Bonding Warehouses	Cigar Manufacturers	Tobacco Manufacturers	Brewers and Maltsters	Chemical Stills	Wood Alcohol Mfrs.	Petroleum Refiners	Manufacturers of Stills	Importers of Stills	Malt Vinegar Brewers	Can. leaf. stemmers	Acetic Acid	Compounders
Fredericton	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Moncton	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....
St. John	1	8	2	1	....	2	2	....	....	....	....	....	....	....	....
St. Stephen	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....
Woodstock	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....
New Brunswick	1	14	3	1	....	2	3	....	....	....	....	....	....	....	....
Amherst	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
Halifax	....	4	2	....	....	2	1	....	1	....	1	....	....	....	....
Yarmouth	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....
Nova Scotia	....	5	2	1	....	2	2	....	1	....	1	....	....	....	....
Charlottetown, P.E.I	....	1	....	....	3	....	....	....	....	....	....	....	....	....	....
Brandon	....	....	....	....	....	2	1	....	....	....	....	....	....	....	....
Winnipeg	2	27	7	2	2	7	8	....	1	1	....	1	....	....	....
Manitoba	2	27	7	2	2	9	9	....	1	1	....	1	....	....	....
Moose Jaw	....	....	1	....	....	1	2	....	....	....	....	....	....	....	....
North Portal	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Regina	....	....	2	....	....	1	4	....	1	....	....	....	....	....	....
Saskatoon	....	1	1	1	....	1	2	....	....	....	....	....	....	....	....
Prince Albert	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Saskatchewan	....	1	4	1	....	5	8	....	1	....	....	....	....	....	....
Calgary	....	3	2	1	....	3	6	....	4	....	1	1	....	....	....
Edmonton	....	4	2	....	....	2	6	....	1	....	....	....	....	....	....
Lethbridge	....	....	....	....	....	1	2	....	4	....	....	....	....	....	....
Medicine Hat	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Alberta	....	7	4	1	....	7	14	....	9	....	1	1	....	....	....
Cranbrook	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Fernie	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Nanaimo	....	....	....	2	....	2	....	....	....	....	....	....	....	....	....
Nelson	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
New Westminster	1	....	....	2	....	1	....	....	....	....	....	....	....	....	....
Penticton	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Revelstoke	....	....	....	....	....	3	....	....	....	....	....	....	....	....	....
Rossland	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vancouver	3	10	4	4	2	5	3	....	3	1	....	....	....	....	1
Victoria	....	1	2	1	....	2	1	....	....	....	....	....	....	....	....
British Columbia	4	11	6	9	2	17	4	....	3	1	....	....	....	....	1
Dawson, Y.T	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Grand Total	**23**	**346**	**62**	**90**	**58**	**93**	**152**	**6**	**22**	**6**	**20**	**3**	**9**	**3**	**3**

EXCISE TAXES

STATEMENT showing Excise Taxes (Domestic and Impor

	Ports	Licenses	Stamps	Auto-mobiles	Matches	Sales	Playing Cards	Cigars
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	NOVA SCOTIA—							
1	Amherst	124 00	4,986 73			65,716 97		
2	Annapolis Royal	18 00	2,243 00			6,813 90		
3	Antigonish	8 00	1,504 02			427 97		
4	Arichat		319 44					
5	Baddeck	20 00	439 15			36 75		
6	Barrington Passage	18 00	370 09			325 97		
7	Bridgewater	36 00	2,057 36			3,500 82		
8	Canso	10 00	1,096 54			968 81		
9	Digby	20 00	1,347 34			1,207 97		
10	Glace Bay	16 00	2,073 57			9,466 20		
11	Halifax	288 00	40,988 92	26 25	5,303 19	210,985 69		
12	Kentville	54 00	6,385 80			8,692 13		
13	Liverpool	48 00	1,114 38			4,873 75		
14	Lockeport		230 32					
15	Lunenburg	38 00	2,105 61			6,866 98		
16	Middleton	8 00	1,402 12			2,077 66		
17	New Glasgow	68 00	4,589 27			155,520 59		
18	North Sydney	16 00	2,564 79			6,938 11		
19	Parrsboro	24 00	1,066 91			130 99		
20	Pictou	42 00	1,714 10			8,668 63		
21	Port Hawkesbury	2 00	260 52					
22	Port Hood	24 00	594 96			69 89		
23	Shelburne	24 00	334 48			994 26		
24	Sydney	34 00	11,307 66			222,291 35		
25	Truro	72 00	4,789 64			79,902 17		
26	Weymouth	34 00	540 18			1,885 53		
27	Windsor	52 00	3,068 41			20,552 66		
28	Yarmouth	48 00	3,655 28			11,226 25		149 65
		1,146 00	103,150 59	26 25	5,303 19	830,142 00		149 65
	PRINCE EDWARD ISLAND—							
29	Charlottetown	222 00	9,516 34			23,675 30		
30	Summerside	100 00	3,935 95			4,235 30		
		322 00	13,452 29			27,910 60		
	NEW BRUNSWICK—							
31	Bathurst	126 00	3,046 61			7,208 23		
32	Campbellton	68 00	5,121 16			10,811 30		
33	Chatham	100 00	1,867 15	89 35		15,746 96		
34	Fredericton	92 00	6,887 79			32,518 52		
35	McAdam Junction	8 00	263 98			121 36		
36	Moncton	100 00	10,412 41	57 53		84,355 24		
37	Newcastle	30 00	1,584 80			1,984 99		
38	Sackville	34 00	2,103 39			33,665 54		
39	St. Andrews	28 00	588 88			452 15		
40	St. John	380 00	39,387 85	145 40	2,919 60	305,584 19		237 23
41	St. Stephen	26 00	1,836 14			47,096 41		
42	Woodstock	126 00	8,085 66	134 00		15,468 11		
		1,118 00	81,185 82	426 28	2,919 60	555,013 00		237 23
	QUEBEC—							
43	Athelstan	28 00	1,745 68			1,577 80		
44	Beebe Junction	94 00	3,765 96			63,887 30		
45	Chicoutimi	166 00	16,366 79			39,920 79		37 05
46	Coaticook	40 00	1,588 36			7,511 29		
47	Gaspe	2 00	881 42			1,388 07		
48	Granby	110 00	3,596 36			83,677 87		1,264 52
49	Hull	326 00	10,748 67		840,970 33	215,478 02		
50	Lake Megantic	22 00	1,355 88			3,607 72		
51	Montreal	6,430 50	1,143,213 06	4,771 28	371,281 58	15,882,710 73	81,360 00	172,166 48
52	Paspebiac	24 00	1,343 66			2,004 47		
53	Perce	30 00	666 12			542 60		
54	Port Burwell							
55	Quebec	1,274 00	98,961 19	3,271 75	11,017 14	922,095 07		3,315 37
56	Rimouski	122 00	7,066 18			9,544 78		
57	Shawinigan Falls	116 00	8,830 83			58,551 29		
58	Sherbrooke	613 50	35,090 71			409,472 51		188 59
59	Sorel	106 00	3,589 47			26,324 45		
60	Sutton	42 00	2,171 91			5,165 78		
61	St. Armand		17 14					
62	St. Hyacinthe	218 00	9,831 72	22 85		136,577 93		3 25
63	St. Johns	178 00	7,198 30			160,249 77		
64	Three Rivers	180 00	19,967 24	130 00		117,522 12		
65	Valleyfield	78 00	3,830 57			70,158 96		
		10,200 00	1,381,827 22	8,195 88	1,223,269 05	18,217,969 32	81,360 00	176,975 26

tations) collected during the fiscal year 1927-28

Wines	Ale, Beer, etc.	Transportation	Embossed cheques	Penalties and Interest	Domestic Total	Importations		Grand Total	
						Sales	Excise		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	.....	.....	313 43	71,141 13	5,360 29	1,432 41	77,933 83	1
.....	.....	1 05	.....	.....	9,075 95	2,383 78	296 71	11,756 44	2
.....	.....	.....	.....	0 53	1,940 52	1,096 32	45 38	3,082 22	3
.....	.....	.....	.....	.....	319 44	70 63	9 00	399 07	4
.....	.....	.....	.....	.....	495 90	364 05	51 07	911 02	5
.....	.....	.....	.....	0 08	714 14	158 59	39 23	911 96	6
.....	.....	.....	.....	30 33	5,624 51	987 09	127 80	6,739 40	7
.....	.....	.....	.....	.....	2,075 35	2,585 70	28 27	4,689 32	8
.....	.....	.....	.....	.....	2,575 31	2,504 83	371 17	5,451 31	9
.....	.....	200 05	41 20	.....	11,797 02	10,913 56	1,935 72	24,646 30	10
.....	25,814 32	4,037 03	573 32	475 41	288,492 13	235,816 08	28,976 04	553,284 25	11
.....	.....	9,497 00	424 18	6 93	25,060 04	2,872 54	99 27	28,031 85	12
.....	.....	.....	.....	6 46	6,042 59	2,363 15	67 12	8,472 86	13
.....	.....	.....	.....	.....	230 32	86 24	13 50	330 06	14
.....	.....	.....	.....	13 83	9,024 42	2,368 52	156 31	11,549 25	15
.....	.....	3 30	.....	.....	3,491 08	203 20	24 50	3,718 78	16
.....	.....	.....	.....	292 16	160,470 02	8,717 68	1,149 97	170,337 67	17
.....	.....	572 85	.....	0 31	10,092 06	4,172 06	101 16	14,365 28	18
.....	.....	.....	.....	0 85	1,222 75	315 34	12 39	1,550 48	19
.....	.....	144 80	.....	5 29	10,574 82	986 23	38 00	11,599 05	20
.....	.....	.....	.....	.....	262 52	624 51	.....	887 03	21
.....	.....	21 05	.....	.....	709 90	393 70	2 77	1,106 37	22
.....	.....	.....	.....	4 74	1,357 48	1,221 20	9 84	2,588 52	23
.....	.....	84 90	.....	19 07	233,736 98	19,983 58	7,114 16	260,834 72	24
.....	.....	.....	.....	97 90	84,861 71	12,667 79	6,611 65	104,141 15	25
.....	.....	2 15	.....	11 97	2,473 83	882 70	212 74	3,569 27	26
.....	.....	25 50	.....	6 44	23,705 01	3,694 95	141 34	27,541 30	27
.....	.....	1,191 40	.....	1 57	16,272 15	9,399 19	2,369 20	28,040 54	28
.....	25,814 32	15,781 08	1,038 70	1,287 30	983,839 08	333,193 50	51,436 72	1,368,469 30	
.....	.....	.....	.....	88 33	33,501 97	20,253 04	3,551 61	57,306 62	29
.....	.....	.....	.....	1 69	8,272 94	7,259 68	1,984 56	17,517 18	30
.....	.....	.....	.....	90 02	41,774 91	27,512 72	5,536 17	74,823 80	
.....	.....	.....	.....	10 46	10,391 30	2,757 41	1,215 59	14,364 30	31
.....	.....	.....	.....	6 33	16,006 79	3,333 56	1,325 78	20,666 13	32
.....	.....	79 75	.....	305 61	18,188 82	1,829 05	228 79	20,246 66	33
.....	.....	.....	.....	14 83	39,513 14	79,028 49	3,623 90	122,165 53	34
.....	.....	.....	.....	.....	393 34	1,101 02	46 08	1,540 44	35
.....	.....	.....	7,898 70	72 77	102,896 65	69,155 85	3,584 00	175,636 50	36
.....	.....	.....	.....	3 51	3,603 30	1,187 19	544 27	5,334 76	37
.....	.....	.....	.....	.....	35,802 93	826 90	138 42	36,768 25	38
.....	.....	297 25	.....	0 14	1,366 42	2,222 22	37 20	3,625 84	39
.....	33,051,28	917 90	42 34	597 62	383,263 41	191,666 34	11,355 71	586,285 46	40
.....	.....	.....	.....	0 89	48,959 44	7,920 95	2,739 33	59,619 72	41
.....	.....	.....	.....	52 17	23,865 94	12,229 84	5,161 59	41,257 37	42
.....	33,051 28	1,294 90	7,941 04	1,064 33	684,251 48	373,258 82	30,000 66	1,087,510 96	
.....	.....	.....	.....	0 76	3,352 24	13,894 82	12,717 53	29,964 59	43
.....	.....	.....	.....	170 49	67,917 75	17,569 61	1,091 72	86,579 08	44
.....	.....	396 75	.....	202 79	57,090 17	38,679 64	3,656 93	99,426 74	45
.....	.....	.....	.....	.....	9,139 65	1,429 22	228 77	10,797 64	46
.....	.....	.....	.....	.....	2,271 49	296 64	.....	2,568 13	47
.....	.....	.....	.....	28 56	88,677 31	4,274 01	383 14	93,334 46	48
.....	.....	70 00	276 82	1,092 19	1,068,962 03	34,895 97	171 41	1,104,029 41	49
.....	.....	.....	.....	.....	4,985 60	732 45	471 17	6,189 22	50
.....	3,138,292 63	2,000,397 11	51,310 54	59,372 00	22,911,305 91	3,330,811 10	344,376 22	26,586,493 23	51
.....	.....	2,650 25	.....	57 28	6,079 66	296 36	13 14	6,389 16	52
.....	.....	.....	.....	21 79	1,260 51	853 19	4 38	2,118 08	53
.....	.....	.....	.....	.....	.....	456 19	24 30	480 49	54
3,075 79	437,596 98	7,891 20	100 62	7,364 06	1,495,963 17	334,925 63	29,360 92	1,860,249 72	55
.....	.....	1,503 65	.....	36 41	18,273 02	1,792 72	553 14	20,618 88	56
.....	.....	.....	.....	122 80	67,620 92	25,845 02	456 74	93,922 68	57
.....	15,253,66	10,695 05	134 72	2,580 38	474,029 12	77,183 56	9,409 58	560,622 26	58
.....	.....	.....	.....	32 33	30,052 25	2,720 90	21 33	32,794 48	59
.....	.....	.....	.....	.....	7,379 69	4,391 22	2,065 89	13,836 80	60
.....	.....	.....	.....	.....	17 14	4,036 96	380 06	4,434 16	61
.....	.....	.....	.....	230 62	146,884 37	43,866 95	2,233 16	192,984 48	62
.....	.....	.....	41 14	123 53	167,790 74	47,908 01	15,791 26	231,490 01	63
.....	.....	.....	.....	247 40	138,046 76	68,925 22	6,916 75	213,888 73	64
.....	10,040 31	.....	.....	245 35	84,353 19	5,776 81	224 26	90,354 26	65
3,075 79	3,601,183 58	2,023,604 01	51,863 84	71,928 74	26,851,452 69	4,061,562 20	430,551 80	31,343,566 69	

STATEMENT showing Excise Taxes (Domestic and Impor

	Ports	Licenses	Stamps	Automobiles	Matches	Sales	Playing Cards	Cigars
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	ONTARIO—							
1	Amherstburg	96 00	9,741 06			33,811 43		
2	Belleville	190 00	12,749 57			183,991 76		
3	Bowmanville	26 00	1,783 28			255,043 56		
4	Brantford	252 00	17,270 60			381,451 03		
5	Bridgeburg	106 00	2,645 00			91,719 91		
6	Brockville	52 00	6,651 67			64,306 11		
7	Chatham	266 00	16,698 28	384 20		87,033 22		
8	Cobourg	88 00	4,044 83			39,203 45		
9	Collingwood	120 00	4,658 57			31,527 03		
10	Cornwall	96 00	6,389 76			51,155 40		
11	Deseronto	8 00	466 50			7,028 97		
12	Fort Frances	36 00	4,213 04			28,912 87		
13	Fort William	86 00	9,743 36		6,704 10	36,646 26		
14	Galt	262 00	11,469 02			459,381 34		
15	Gananoque	40 00	2,369 09			8,511 17		
16	Goderich	212 00	11,905 61			123,613 67		
17	Guelph	490 00	20,916 84	4,321 75		583,761 02		
18	Hamilton	1,392 00	88,156 95	2,878 30	2,646 00	3,183,994 37		30,958 73
19	Ingersoll	82 00	4,145 23			22,030 03		
20	Kenora	48 00	3,515 00			27,599 91		
21	Kingston	134 00	11,635 28			134,289 28		
22	Kitchener	512 00	29,180 01			751,256 06		363 06
23	Lindsay	96 00	7,759 96			36,728 53		
24	London	726 00	54,351 92		2,295 00	953,678 78		20,283 47
25	Midland	129,00	4,720 45			43,643 28		
26	Morrisburg	24 00	2,239 85			9,784 49		
27	Napanee	18,00	2,880 79			17,584 06		
28	Niagara Falls	164 00	10,326 04			230,756 78		143 33
29	North Bay	272 00	36,405 72			102,596 75		
30	Orillia	208 00	9,239 28			69,303 66		
31	Oshawa	110 00	14,574 86	349,285 65		1,991,117 99		
32	Ottawa	514 00	121,587 07	3,355 11	814,614 99	873,273 21		
33	Owen Sound	122 00	10,442 27			138,581 24		726 02
34	Paris	46 00	3,073 28			208,184 62		
35	Parry Sound	168 00	1,885 93			10,172 15		
36	Peterboro	104 00	14,331 73			435,079 03		
37	Picton	100 00	3,126 00			17,273 56		
38	Port Arthur	102 00	9,478 45			53,299 40		
39	Port Hope	48 00	3,053 35			20,201 15		
40	Port McNicoll	6 00	254 58			71 14		
41	Prescott	50 00	2,490 54			152,071 18		
42	Sarnia	140 00	13,978 72			1,982,282 47		
43	Sault Ste. Marie	138 00	12,108 04			379,867 34		32 30
44	Simcoe	86 00	6,789 63			34,736 88		
45	Stratford	208 00	15,450 79	5,021 15		305,796 11		79 75
46	Sudbury	64 00	11,708 21			71,949 99		
47	St. Catharines	266 00	14,745 37			301,337 13		86 59
48	St. Thomas	140 00	12,819 51			78,514 74		238 00
49	Tillsonburg	72 00	2,746 48			23,485 50		
50	Toronto	6,952 00	1,004,564 73	159,896 30	9,984 20	13,262,963 18		84,135 20
51	Trenton	36 00	2,110 96			22,407 86		
52	Wallaceburg	38 00	2,011 78			14,313 45		
53	Welland	136 00	7,753 09			89,289 03		17 97
54	Whitby	42 00	3,863 42			10,555 35		
55	Windsor	586 00	59,374 15	296,856 02		1,824,016 41	143,500 00	
56	Woodstock	208 00	7,078 39			170,140 33		
		16,713 00	1,769,673 89	821,998 48	836,244 29	30,521,324 62	143,500 00	137,064 42
	MANITOBA—							
57	Brandon	48 00	20,310 45			22,772 87		
58	Emerson		341 48					
59	Gretna		584 16					
60	Portage la Prairie	44 00	15,006 60	56 97		27,396 77		
61	Winnipeg	1,182 00	271,602 66	2,178 85	17,769 52	1,830,059 75		120 25
		1,274 00	307,845 35	2,235 82	17,769 52	1,880,229 39		120 25
	SASKATCHEWAN—							
62	Moose Jaw	50 00	57,693 79	58 80	8,793 99	42,031 32		
63	North Portal	10 00	4,740 55			4,747 18		
64	Prince Albert	72 00	26,839 52			48,696 59		
65	Regina	180 00	77,081 57		5,547 15	90,844 23		
66	Saskatoon	138 00	55,423 74		9,660 88	74,609 77		7 11
		450 00	221,779 17	58 80	24,002 02	260,929 09		7 11

tations) collected during the fiscal year 1927-28—*Continued*

Wines	Ale, Beer, etc.	Transportation	Embossed cheques	Penalties and Interest	Domestic Total	Importations		Grand Total	
						Sales	Excise		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	1,226 05	.....	198 55	45,073 09	17,828 72	34 20	62,936 01	1
43 21	4,565 49	.....	.....	187 63	201,727 66	27,727 82	12,684 32	242,139 80	2
.....	.....	.....	.....	227 42	257,080 26	2,510 67	.....	259,590 93	3
406 88	3,302 23	.....	279 64	93 38	403,055 76	51,645 22	350 57	455,051 55	4
.....	.....	.....	.....	24 66	94,495 57	61,342 05	30,374 44	186,212 06	5
.....	.....	76 75	.....	13 10	71,099 63	10,984 22	172 48	82,256 33	6
.....	.....	.....	570 22	34 78	104,986 70	31,052 24	822 93	136,861 87	7
.....	.....	.....	.....	26 71	43,362 99	8,384 40	420 44	52,167 83	8
.....	.....	.....	.....	51 93	36,357 53	2,630 75	222 96	39,211 24	9
.....	.....	69 50	.....	39 46	57,750 12	34,961 18	1,269 80	93,981 10	10
.....	.....	.....	.....	.....	7,503 47	265 21	.....	7,768 68	11
.....	13,838 40	.....	.....	8 37	47,008 68	19,997 56	725 20	67,731 44	12
769 97	17,782 62	32 85	.....	172 81	71,937 97	92,321 76	6,636 87	170,896 60	13
.....	261 77	1,395 25	205 36	292 45	473,267 19	22,647 18	147 67	496,062 04	14
.....	.....	141 40	.....	6 00	11,067 66	4,391 35	44 66	15,503 67	15
.....	.....	16 25	34 44	76 48	135,858 45	5,560 74	170 57	141,589 76	16
.....	8,507 50	34 00	104 30	457 11	618,592 52	30,591 99	2,062 44	651,246 95	17
3,345 83	65,980 03	3,349 65	3,360 40	3,443 89	3,389,506 15	306,599 33	8,516 06	3,704,621 54	18
.....	.....	.....	54 18	23 68	26,335 12	4,858 11	6 60	31,199 83	19
.....	1,009 28	45 00	88 36	4 37	32,309 92	10,925 87	583 10	43,818 89	20
.....	23,027 77	1,423 52	.....	256 54	170,766 39	26,250 24	4,469 17	201,485 80	21
262 43	65,520 67	.....	683 52	1,138 80	848,916 55	53,087 18	827 63	902,831 36	22
.....	.....	.....	.....	162 82	44,747 31	6,501 44	618 65	51,867 40	23
1,479 86	368,529 25	583 85	1,301 55	1,700 25	1,404,929 93	177,618 57	5,754 76	1,588,303 26	24
.....	.....	170 20	.....	56 14	48,719 07	3,651 00	617 18	52,987 25	25
.....	.....	.....	.....	29 71	12,078 05	2,322 81	28 26	14,429 12	26
.....	.....	.....	.....	3 81	20,486 66	7,736 40	24 00	28,247 06	27
105,682 28	.....	5 00	.....	533 99	347,611 42	126,783 93	86,280 50	560,675 85	28
.....	.....	24,503 11	.....	481 47	164,259 05	92,105 84	6,731 30	263,096 19	29
.....	.....	1,116 90	.....	337 11	80,204 95	10,300 32	1,463 30	91,968 57	30
.....	.....	158 55	1,045 82	38 71	2,356,331 58	77,668 67	42,509 16	2,476,509 41	31
.....	124,931 16	227,705 75	4,082 21	3,179 71	2,173,243 21	288,208 04	38,908 97	2,500,360 22	32
.....	.....	887 10	.....	98 53	150,857 16	12,932 16	1,789 63	165,578 95	33
.....	.....	.....	.....	.....	211,303 90	4,212 47	.....	215,516 37	34
.....	.....	17 25	.....	6 83	12,250 16	1,351 93	18 96	13,621 05	35
.....	.....	.....	.....	85 46	449,600 22	51,447 91	4,872 45	505,920 58	36
.....	.....	.....	.....	6 91	20,506 47	1,567 56	22 64	22,096 67	37
.....	21,050 88	29 05	.....	494 68	84,454 46	65,707 18	5,636 96	155,798 60	38
.....	.....	.....	.....	2 55	23,305 05	4,258 19	39 54	27,602 78	39
.....	.....	.....	.....	.....	331 72	380 31	.....	712 03	40
.....	.....	53 95	.....	0 73	154,666 40	6,282 80	2,354 67	163,303 87	41
.....	2,000 35	66 35	26 98	31 63	1,998,526 50	78,652 00	40,328 24	2,117,506 74	42
.....	20,587 07	2,564 19	.....	106 72	415,403 66	40,775 98	4,876 48	461,056 12	43
.....	.....	.....	.....	10 66	41,623 17	12,580 41	8,939 88	63,143 46	44
.....	1,011 46	.....	.....	101 53	327,668 79	28,291 50	2,561 58	358,521 87	45
67 64	51,995 81	40 00	.....	759 38	136,585 03	22,820 00	3,106 62	162,511 65	46
42,296 64	23,559 13	1,950 80	234 58	818 69	385,294 93	49,512 60	6,131 66	440,939 19	47
.....	.....	.....	.....	5 71	91,717 96	43,328 14	4,661 23	139,707 33	48
.....	.....	.....	.....	66 68	26,370 66	5,673 74	.....	32,044 40	49
6,138 57	258,629 84	157,887 54	55,726 11	33,354 72	15,040,232 39	4,045,749 07	213,379 25	19,299,360 71	50
.....	.....	.....	.....	26 31	24,581 13	5,452 33	69 94	30,103 40	51
.....	.....	.....	.....	4 48	16,367 71	4,116 27	323 96	20,807 94	52
74 64	16,641 40	31 00	432 02	65 85	114,441 00	29,811 14	8,618 27	152,870 41	53
.....	.....	.....	.....	21 39	14,482 16	396 38	63 00	14,941 54	54
1,678 93	86,898 78	37 00	1,719 62	1,691 18	2,416,358 09	779,049 84	552,031 50	3,747,439 43	55
.....	.....	.....	.....	345 25	177,771 97	16,892 09	349 02	195,013 08	56
162,246 88	1,179,630 89	425,617 81	69,949 31	51,407 71	36,135,371 30	6,930,702 81	1,113,653 67	44,179,727 78	
.....	26,169 98	.....	.....	50 75	69,352 05	42,716 28	6,585 54	118,653 87	57
.....	.....	.....	.....	.....	341 48	21,297 31	5,415 17	27,053 96	58
.....	.....	.....	.....	.....	584 16	5,194 43	266 60	6,045 19	59
.....	.....	92 30	.....	19 66	42,616 30	30,187 49	1,493 87	74,297 66	60
117 32	344,129 26	17,883 20	29,008 79	6,544 52	2,520,596 12	1,363,410 75	89,507 69	3,973,514 56	61
117 32	370,299 24	17,975 50	29,008 79	6,614 93	2,633,490 11	1,462,806 26	103,268 87	4,199,565 24	
.....	39,644 92	.....	311 38	1 01	148,585 21	113,536 15	18,615 07	280,736 43	62
.....	.....	.....	.....	.....	9,497 73	25,184 20	3,329 39	38,011 32	63
.....	37,619 32	.....	201 18	407 35	113,835 96	21,868 18	3,564 46	139,268 60	64
.....	44,022 90	5 00	1,025 42	1,110 87	219,817 14	379,769 68	33,579 84	633,166 66	65
.....	45,627 72	.....	166 50	450 93	186,084 65	187,447 46	26,363 04	399,895 15	66
.....	166,914 86	5 00	1,704 48	1,970 16	677,820 69	727,805 67	85,451 80	1,491,078 16	

STATEMENT showing Excise Taxes (Domestic and Impor

	Ports	Licenses	Stamps	Automobiles	Matches	Sales	Playing Cards	Cigars
	ALBERTA—							
1	Calgary	422 00	107,520 92	2,249 25	6,171 07	398,687 66	.....	213 55
2	Edmonton	526 00	89,905 48	.....	13,035 34	363,540 51	.....	69 45
3	Lethbridge	64 00	18,929 09	.....	.....	80,341 60	.....	.....
4	Medicine Hat	36 00	5,907 25	52 50	.....	36,827 01	.....	.....
		1,048 00	222,262 74	2,301 75	19,206 41	879,396 78	.....	283 00
	BRITISH COLUMBIA—							
5	Abbottsford	26 00	2,050 97	.....	.....	15,468 78	.....	.....
6	Cranbrook	38 00	3,461 69	.....	.....	29,848 69	.....	.....
7	Fernie	30 00	1,790 23	.....	.....	11,649 07	.....	.....
8	Grand Forks	14 00	940 40	.....	.....	1,622 44	.....	.....
9	Nanaimo	130 00	10,269 61	.....	.....	55,127 30	.....	288 96
10	Nelson	98 00	5,570 49	.....	.....	31,074 31	.....	.....
11	New Westminster	302 00	16,410 76	30 73	.....	263,020 50	.....	354 00
12	Penticton	80 00	8,158 87	.....	.....	19,141 46	.....	.....
13	Prince Rupert	228 00	9,921 21	.....	.....	58,831 13	.....	.....
14	Revelstoke	192 00	11,823 86	16 80	.....	34,309 27	.....	.....
15	Rossland	36 00	3,996 28	.....	.....	10,338 78	.....	.....
16	Vancouver	1,885 00	203,709 05	1,951 81	16,418 82	1,391,413 41	.....	5,026 04
17	Victoria	501 00	31,029 82	1,043 78	3,298 20	283,358 46	.....	120 88
		3,560 00	309,133 24	3,043 12	19,717 02	2,205,203 60	.....	5,789 88
	YUKON TERRITORY—							
18	Dawson	4 00	539 14	.....	.....	544 57	.....	.....
19	White Horse	4 00	236 22	.....	.....	421 52	.....	.....
		8 00	775 36	.....	.....	966 09	.....	.....
	SUMMARY—							
20	Nova Scotia	1,146 00	103,150 59	26 25	5,303 19	830,142 00	.....	149 65
21	Prince Edward Island	322 00	13,452 29	.....	.....	27,910 60	.....	.....
22	New Brunswick	1,118 00	81,185 82	426 28	2,919 60	555,013 00	.....	237 23
23	Quebec	10,200 00	1,381,827 22	8,195 88	1,223,269 05	18,217,969 32	81,360 00	176,975 26
24	Ontario	16,713 00	1,769,673 89	821,998 48	836,244 29	30,521,324 62	143,500 00	137,064 42
25	Manitoba	1,274 00	307,845 35	2,235 82	17,769 52	1,880,229 39	.....	120 25
26	Saskatchewan	450 00	221,779 17	58 80	24,002 02	260,929 09	.....	7 11
27	Alberta	1,048 00	222,262 74	2,301 75	19,206 41	879,396 78	.....	283 00
28	British Columbia	3,560 00	309,133 24	3,043 12	19,717 02	2,205,203 60	.....	5,789 88
29	Yukon Territory	8 00	775 36	.....	.....	966 09	.....	.....
		.....	.....	.....	.....	.....	.....	.....
		.....	.....	.....	.....	.....	.....	.....
		35,839 00	**4,411,085 67**	**838,286 38**	**2,148,431 10**	**55,379,084 49**	**224,860 00**	**320,626 80**

tations) collected during the fiscal year 1927-28—*Concluded*

Wines	Ale, Beer, etc.	Transportation	Embossed cheques	Penalties and Interest	Domestic Total	Importations		Grand Total	
						Sales	Excise		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	238,132 67	.....	1,120 85	940 61	755,458 58	352,415 94	48,564 64	1,156,439 16	1
.....	153,167 84	8,357 03	85 98	960 04	629,647 67	269,767 16	33,294 55	932,709 38	2
.....	132,233 66	.....	33 70	109 68	231,711 73	59,618 50	3,983 62	295,313 85	3
.....	3,501 59	.....	.....	4 57	46,328 92	15,282 83	1,026 63	62,638 38	4
.....	527,035 76	8,357 03	1,240 53	2,014 90	1,663,146 90	697,084 43	86,869 44	2,447,100 77	
.....	.....	.....	.....	42 91	17,588 66	8,062 37	853 33	26,504 36	5
.....	14,418 57	.....	.....	68 97	47,835 92	10,710 22	3,231 14	61,777 28	6
.....	18,052 30	5 00	35 88	48 27	31,610 75	16,569 45	262 46	48,442 66	7
.....	.....	.....	.....	1 07	2,577 91	11,871 56	455 58	14,905 05	8
.....	10 50	162 55	.....	41 68	66,030 60	8,135 90	1,187 63	75,354 13	9
.....	22,589 92	10 00	184 86	159 16	59,686 74	16,576 63	2,482 31	78,745 68	10
85 99	45,680 84	25 00	.....	696 65	326,606 47	35,682 15	12,937 33	375,225 95	11
.....	5,342 66	1,954 70	.....	62 11	34,739 80	6,987 20	819 31	42,546 31	12
.....	.....	60 00	918 78	311 93	70,271 05	22,615 97	672 24	93,559 26	13
.....	5,926 75	.....	.....	102 13	52,370 81	7,720 07	1,379 81	61,470 69	14
.....	.....	.....	.....	4 25	14,375 31	13,377 08	938 97	28,691 36	15
2,315 52	205,435 83	38,603 80	9,262 94	8,352 43	1,884,374 65	1,678,497 13	109,581 03	3,672,452 81	16
3,145 11	99,203 00	1,514 15	1,203 40	513 41	424,931 21	256,247 11	18,170 50	699,348 82	17
5,546 62	416,660 37	42,335 20	11,605 86	10,404 97	3,032,999 88	2,093,052 84	152,971 64	5,279,024 36	
.....	.....	.....	.....	.....	1,087 71	5,370 72	203 95	6,662 38	18
.....	.....	11 25	.....	.....	672 99	7,046 94	116 67	7,836 60	19
.....	.....	11 25	.....	.....	1,760 70	12,417 66	320 62	14,498 98	
.....	25,814 32	15,781 08	1,038 70	1,287 30	983,839 08	333,193 50	51,436 72	1,368,469 30	20
.....	.....	.....	.....	90 02	41,774 91	27,512 72	5,536 17	74,823 80	21
.....	33,051 28	1,294 90	7,941 04	1,064 33	684,251 48	373,258 82	30,000 66	1,087,510 96	22
3,075 79	3,601,183 58	2,023,604 01	51,863 84	71,928 74	26,851,452 69	4,061,562 20	430,551 80	31,343,566 69	23
162,246 88	1,179,630 89	425,617 81	69,949 31	51,407 71	36,135,371 30	6,930,702 81	1,113,653 67	44,179,727 78	24
117 32	370,299 24	17,975 50	29,008 79	6,614 93	2,633,490 11	1,462,806 26	103,268 87	4,199,565 24	25
.....	166,914 86	5 00	1,704 48	1,970 16	677,820 69	727,805 67	85,451 80	1,491,078 16	26
.....	527,035 76	8,357 03	1,240 53	2,014 90	1,663,146 90	697,084 43	86,869 44	2,447,100 77	27
5,546 62	416,660 37	42,335 20	11,605 86	10,404 97	3,032,999 88	2,093,052 84	152,971 64	5,279,024 36	28
.....	.....	11 25	.....	.....	1,760 70	12,417 66	320 62	14,498 98	29
British Post Office Parcels				.....	.....	1,762 72	.....	1,762 72	
Embossed Cheques (Departmental)			174,956 98	.....	174,956 98	.....	.....	174,956 98	
170,986 61	**6,320,590 30**	**2,534,981 78**	**349,309 53**	**146,783 06**	**72,880,864 72**	**16,721,159 63**	**2,060,061 39**	**91,662,085 74**	

INCOME TAXES

INCOME TAX DIVISION,

OTTAWA, October 15, 1928.

Hon. W. D. EULER,
Minister of National Revenue,
Ottawa.

SIR,—I have the honour to submit a statement showing the amount of taxes collected under the Income War Tax Act for the fiscal year ended March 31, 1928.

I have the honour, to be, sir,

Your obedient servant,

C. S. WALTERS,
Commissioner of Income Tax.

Income Tax Division—Statement of Income Tax Collected for Year ended March 31, 1928

—	1917 Assessments paid	1918 Assessments paid	1919 Assessments paid	1920 Assessments paid	1921 Assessments paid	1922 Assessments paid	1923 Assessments paid	1924 Assessments paid	1925 Assessments paid	1926 Assessments paid	1927 Assessments paid	1928 Assessments paid in advance	Total
	$	$	$	$	$	$	$	$	$	$	$	$	$
1. Halifax	1,709 07	5,345 68	19,463 13	12,984 14	15,770 16	19,633 16	18,449 16	24,180 44	30,486 13	428,803 76	10,521 40	.....	587,346 23
2. St. John	D 2,578 77	4,702 93	19,734 82	27,075 38	25,003 29	13,271 89	10,009 12	16,301 87	19,429 84	515,896 20	6,387 50	.....	655,234 07
3. Quebec	6,865 96	18,479 60	38,127 48	24,619 61	42,211 52	53,836 61	47,915 61	58,272 79	81,880 75	1,081,605 98	15,147 64	.....	1,468,963 55
4. Montreal	10,286 96	53,327 49	205,569 59	204,843 63	206,808 57	128,047 33	232,657 14	365,862 16	578,811 55	15,258,021 63	130,727 60	.....	17,374,963 65
5. Ottawa	4,921 34	2,222 98	7,548 88	28,655 57	19,051 71	52,861 53	35,320 26	57,608 18	90,717 19	2,337,632 41	11,951 92	.....	2,648,491 97
6. Kingston	1,091 53	672 81	2,093 02	1,385 94	1,704 47	2,116 10	2,457 44	249 74	7,826 58	327,659 48	1,607 88	.....	348,864 99
7. Belleville	.....	1,010 17	672 44	893 02	1,567 34	999 49	1,764 32	3,365 81	8,238 77	247,801 28	2,105 34	.....	268,417 98
8. Toronto	4,683 14	36,721 01	147,354 55	241,291 35	175,602 20	152,458 31	215,954 57	371,181 87	735,069 65	11,114,032 12	126,058 93	163 08	13,320,570 78
9. Hamilton	3,564 24	2,920 63	D 21,718 20	9,039 27	10,002 32	13,982 17	46,855 38	59,026 65	120,796 66	3,595,305 57	104,860 68	.....	3,944,635 37
10. London	2,086 03	1,720 71	6,670 09	8,779 15	15,300 47	12,329 17	25,319 27	46,511 00	181,260 56	4,602,053 13	.. 39,008 38	.....	4,941,037 96
11. Fort William	.....	1,375 11	331 13	11,494 92	9,297 63	1,058 97	4,465 19	15,179 85	19,204 23	292,523 77	5,896 60	.....	360,827 40
12. Winnipeg	850 75	4,063 52	11,754 98	8,892 20	32,338 34	32,049 76	43,830 04	118,903 17	287,738 33	2,550,111 06	50,590 64	.....	3,141,122 79
13. Regina	3,295 49	3,487 13	19,779 80	13,264 71	9,088 65	7,674 78	11,046 32	15,999 78	22,563 15	584,913 14	17,430 76	.....	708,543 71
14. Prince Albert	.....	1,274 64	554 30	2,246 49	544 20	1,074 08	592 13	4,188 43	6,524 75	48,588 75	943 12	.....	66,530 89
15. Calgary	3,860 07	5,867 50	14,339 25	17,848 56	25,063 87	10,809 74	18,020 62	28,007 95	99,709 82	1,040,748 70	9,435 66	74 46	1,273,786 20
16. Vancouver	7,693 81	217,920 30	264,439 03	109,703 51	29,665 45	41,822 27	88,060 42	157,012 25	566,362 46	3,909,553 44	48,126 34	.....	5,440,359 28
17. Yukon	.....	.....	37 26	71 23	44 37	23 95	82 38	D 218 86	D 450 81	21,300 42	460 63	.....	21,350 57
Total	48,329 62	361,112 21	736,751 55	723,088 68	619,064 56	544,049 31	802,799 37	1,341,633 08	2,856,169 61	47,956,550 84	581,261 02	237 54	56,571,047 39

(D) denotes refunds in excess of collections.

SHIPPING REPORT

RAPPORT DE LA NAVIGATION

73808—1

SHIPPING REPORT

OF THE

DEPARTMENT OF NATIONAL REVENUE

(CUSTOMS DIVISION)

CONTAINING THE

STATEMENTS OF NAVIGATION AND SHIPPING

OF THE

DOMINION OF CANADA

FOR

THE FISCAL YEAR ENDED MARCH 31

1928

COMPILED FROM OFFICIAL RETURNS IN THE
DEPARTMENT OF NATIONAL REVENUE

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

RAPPORT DE LA NAVIGATION

DU

MINISTÈRE DU REVENU NATIONAL

(SERVICE DES DOUANES)

CONTENANT LA

STATISTIQUE DE LA NAVIGATION INTÉRIEURE ET MARITIME

DU

DOMINION DU CANADA

POUR

L'EXERCICE SE TERMINANT LE 31 MARS

1928

RAPPORTS OFFICIELS COMPILÉS PAR LE
MINISTÈRE DU REVENU NATIONAL

OTTAWA
F. A. ACLAND
IMPRIMEUR DE SA TRÈS EXCELLENTE MAJESTÉ LE ROI
1929

W. D. EULER, Esq.,
Minister of National Revenue.

SIR,—I have the honour to hand you the Annual Shipping Report of the Department of National Revenue (Customs Division), containing statements of Navigation and Shipping of the Dominion of Canada for the fiscal year ended March 31, 1928, as compiled from official returns.

I have the honour to be, sir,
Your obedient servant,

R. W. BREADNER,
Commissioner of Customs.

OTTAWA, November 21, 1928.

M. W. D. EULER,
Ministre du Revenu national.

MONSIEUR,—J'ai l'honneur de vous soumettre le rapport annuel de la Navigation du ministère du Revenu national (Service des Douanes), comprenant les tableaux de la navigation intérieure et maritime du Dominion du Canada pour l'exercice se terminant le 31 mars 1928, tel que compilé des rapports officiels.

J'ai l'honneur d'être, monsieur,
Votre tout dévoué,

R. W. BREADNER,
Commissaire des Douanes.

OTTAWA, le 21 novembre 1928.

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.MG., etc., etc., Governor General and Commander-in-Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of National Revenue containing Statements of Navigation and Shipping of the Dominion of Canada for the fiscal year ended March 31, 1928, as compiled from official returns.

All of which is respectfully submitted.

W. D. EULER,
Minister of National Revenue.

OTTAWA, November 26, 1928.

A Son Excellence le Très Honorable Vicomte Willingdon, G.C.S.I., G.C.M.G., etc., etc., Gouverneur général et Commandant en chef du Dominion du Canada.

QU'IL PLAISE A VOTRE EXCELLENCE:

Le soussigné a l'honneur de présenter à Votre Excellence le rapport annuel du ministère du Revenu National, comprenant les tableaux de la navigation et du commerce du Dominion du Canada pour l'exercice se terminant le 31 mars 1928, tel que compilé des rapports officiels.

Le tout respectueusement soumis.

W. D. EULER,
Ministre du Revenu National.

OTTAWA, le 26 novembre 1928.

INDEX TO STATEMENTS

No. of Statement	Description	Page
1	Total Vessels built, registered, and sold, and total tonnage entered Inwards and Outwards since Confederation	7
2	Statement, by Ports, of Vessels built and registered, 1927	8
3	Statement showing the trade via St. Lawrence River (Sea-going Vessels, Inwards and Outwards)	9
4	Statement of Vessels entered Inwards from Sea, by Ports and Outports	10
5	Abstract, by Countries, of Vessels entered Inwards from Sea	14
6	Statement of Vessels entered Outwards for Sea, by Ports and Outports	18
7	Abstract, by Countries, of Vessels entered Outwards for Sea	22
8	Summary Statement of Sea-going Vessels Arrived and Departed, by Ports	24
9	Statement of the Nationalities of Sea-going Vessels	27
10	Summary Statement of Sea-going Vessels entered Inwards and Outwards	28
11	Summary Statement of Vessels Arrived and Departed (exclusive of Coasting Vessels)	29
12	Trade with each Country, by Ports, and Nationality of Vessels Inwards	30
13	Summary Statement of Vessels Inwards from Sea, by Countries and Nationalities	58
14	Trade with each Country, by Ports, and Nationality of Vessels Outwards	62
15	Summary Statement of Vessels Outwards for Sea, by Countries and Nationalities	90
16	Statement ot intercourse by Inland Navigation between Canada and United States, Inwards	92
17	Statement of intercourse by Inland Navigation between Canada and United States, Outwards	95
18	Summary Statement of Inland Navigation, Inwards and Outwards	98
19	Statement of Vessels entered and cleared, coastwise	99
20	Statement of Vessels Arrived and Departed, by Provinces, Ports and Outports	109

EXPLANATORY NOTE

TONNAGE SHOWN IN STATEMENTS ARE NET TONS

TABLE DE LA STATISTIQUE

Nos des États	Description	Page
1	Nombre total de vaisseaux construits, enregistrés et vendus, et nombre total du tonnage déclarés à l'entrée et à la sortie, depuis la Confédération	7
2	État, par ports, des navires construits et enregistrés, 1927	8
3	État du Commerce *via* le fleuve St-Laurent (long-courriers) à l'entrée et à la sortie	9
4	État, par ports et ports secondaires, des long-courriers déclarés à l'entrée	10
5	Relevé, par pays, des long-courriers déclarés à l'entrée	14
6	État par ports et ports secondaires des long-courriers déclarés à la sortie	18
7	Relevé, par pays, de long-courriers déclarés à la sortie	22
8	État sommaire par ports, des arrivages et départs des long-courriers	24
9	État des nationalités des long-courriers	27
10	État sommaire des long-courriers déclarés à l'entrée et à la sortie	28
11	État sommaire des arrivages et des départs des navires (à l'exclusion des cabotiers)	29
12	Commerce avec chaque pays, par ports, et nationalités des navires déclarés à l'entrée	30
13	État sommaire, par pays, et nationalités des long-courriers déclarés à l'entrée	58
14	Commerce avec chaque pays, par ports et nationalités des navires déclarés à la sortie	62
15	État sommaire, par pays, et nationalités des long-courriers déclarés à la sortie	90
16	État du commerce, par navigation intérieure, entre le Canada et les États-Unis, à l'entrée	92
17	État du commerce, par navigation intérieure, entre le Canada et les États-Unis, à la sortie	95
18	État sommaire de la navigation intérieure à l'entrée et à la sortie	98
19	État des navires déclarés à l'entrée et à la sortie comme cabotiers	99
20	État, par provinces, ports et ports secondaires, des arrivages et des départs des navires	109

NOTE EXPLICATIVE

LE TONNAGE INDIQUÉ DANS LES TABLEAUX EST EN TONNES NETTES

No. 1.—Comparative Statement showing the Tonnage of all Vessels entered Inwards and Outwards, from 1868 to 1928 inclusive.

N° 1.—État comparatif indiquant le tonnage de tous les navires déclarés à l'entrée et à la sortie depuis 1868 à 1928 inclusivement.

NAVIGATION

Fiscal Year — Exercice	Vessels built — Navires construits	Vessels registered — Navires enregistrés	Vessels entered Inwards and Outwards (Sea-going and Inland Navigation exclusive of Coasting) — Navires déclarés à l'entrée et à la sortie (navigation maritime et intérieur à l'exclusion du cabotage)	Vessels entered and cleared Coastwise — Navires du cabotage déclarés à l'entrée et à la sortie	Vessels sold to other countries — Navires vendus à d'autres pays	
					Tonnage — Tonnage	Value — Valeur
	Tons — Tonnes	Tons — Tonnes	Tons — Tonnes	Tons — Tonnes	Tons — Tonnes	$
1868	87,230	113,692	12,982,825	.....	.....	.....
1869	96,439	125,408	10,461,044	.....	.....	.....
1870	93,166	110,852	11,415,870	.....	.....	.....
1871	106,101	121,724	13,126,028	.....	.....	.....
1872	114,065	127,371	12,808,160	.....	.....	.....
1873	140,370	152,226	11,748,997	.....	.....	.....
1874	174,404	163,016	11,399,857	.....	.....	.....
1875	188,098	204,002	9,537,155	.....	.....	.....
1876	165,041	144,422	9,911,199	10,300,939	64,134	2,189,270
1877	127,297	126,160	11,091,244	8,968,862	46,329	1,576,244
1878	106,976	100,089	12,054,890	11,047,661	35,039	1,218,145
1879	103,551	94,882	11,646,812	12,066,683	19,318	529,824
1880	68,756	64,982	13,577,845	14,053,013	16,208	464,327
1881	79,364	70,210	13,802,432	15,116,766	16,808	348,018
1882	68,240	78,076	13,379,882	14,791,064	16,161	402,311
1883	73,576	78,229	13,770,735	15,683,566	23,896	506,538
1884	70,287	80,822	14,359,026	15,473,707	17,368	416,756
1885	57,486	65,962	14,084,712	15,944,422	13,177	246,277
1886	37,531	40,872	13,969,232	16,368,274	14,343	266,363
1887	26,798	67,662	14,090,998	17,513,677	9,263	143,772
1888	22,698	33,298	15,217,308	18,789,279	14,479	289,969
1889	23,835	31,998	16,054,221	19,834,577	16,173	266,817
1890	39,434	53,853	18,446,100	22,797,115	22,844	442,781
1891	55,477	52,506	18,803,648	24,694,580	15,143	280,474
1892	44,321	61,457	18,692,455	24,783,844	36,399	506,747
1893	38,521	45,796	18,539,534	24,579,123	31,317	363,916
1894	23,497	29,878	20,353,081	26,560,968	21,560	243,429
1895	18,728	26,125	19,100,963	25,473,434	16,567	172,563
1896	10,753	14,144	21,870,473	27,431,753	12,203	99,392
1897	12,058	22,959	23,373,933	27,267,979	9,158	105,164
1898	22,426	27,716	24,746,116	29,663 950	17,210	191,069
1899	22,085	28,257	25,420,110	30,212,496	7,562	126,466
1900	28,544	40,443	26,914,095	33,631,730	13,354	205,618
1901	20,156	35,156	26,029,808	34,444,796	4,490	66,468
1902	28,288	34,236	30,025,404	40,700,907	11,360	235,865
1903	30,856	41,405	33,655,043	44,990,358	11,172	220,602
1904	28,397	33,192	31,202,205	45,505,122	7,208	87,115
1905	21,865	27,583	32,277,820	44,377,261	3,696	100,363
1906	18,724	37,639	34,732,172	46,324,062	9,487	187,725
1907*	33,205	31,635	30,595,891	31,691,420	3,855	68,190
1908	49,928	78,144	39,575,031	50,529,835	4,515	132,900
1909	29,023	32,899	40,701,603	52,670,198	3,644	98,643
1910	24,059	33,383	44,567,991	56,750,928	5,047	133,800
1911	22,812	50,006	47,429,545	66,627,934	5,885	201,526
1912	31,065	30,021	52,973,127	66,267,662	4,265	140,350
1913	24,325	30,225	57,849,783	73,644,713	7,976	610,650
1914	46,887	46,909	61,919,483	78,356,809	8,258	169,618
1915	45,721	55,384	53,604,153	73,099,982	17,044	1,150,950
1916	13,497	102,239	57,721,098	68,709,424	4,529	192,575
1917	28,638	105,826	65,712,544	64,895,622	24,954	4,398,570
1918	53,912	70,350	66,802,488	61,462,600	25,252	5,330,850
1919	104,444	102,883	53,229,048	54,503,325	48,965	14,612,338
1920	164,074	237,022	49,493,533	60,552,658	53,407	17,819,477
1921	95,838	188,915	54,648,630	56,225,509	34,623	8,456,573
1922	78,409	131,732	56,665,253	61,827,089	25,462	3,399,450
1923	14,868	57,446	72,403,183	70,970,078	26,394	1,009,327
1924	20,336	74,311	74,947,373	77,365,128	17,076	605,211
1925	36,147	48,054	77,939,051	80,619,819	21,689	717,730
1926	39,840	88,380	75,246,827	82,887,655	24,673	1,413,150
1927	32,801	79,448	77,341,659	85,742,386	27,027	1,984,040
1928	12,904	64,301	83,803,797	89,527,616	16,307	599,490

* 9 months—9 mois.

No. 2.—STATEMENT showing the Description, Number and Tonnage of Vessels built and registered, also the Number, Tonnage and Value of Vessels sold to other Countries at each Port and Outport in the Dominion of Canada during the Fiscal Year ended March 31, 1928

N° 2.—ÉTAT indiquant la description, le nombre et le tonnage des navires construits et enregistrés, ainsi que le nombre, le tonnage et la valeur des navires vendus à d'autres pays dans chaque port et port secondaire du Dominion du Canada durant l'exercice financier se terminant le 31 mars 1928

Ports and Outports—Ports et ports secondaires	Built—Construits						Registered—Enregistrés						Ships sold to other countries — Navires vendus à d'autres pays		
	Steam and motor — Vapeurs		Sail — Voiliers		Total		Steam and motor — Vapeurs		Sail — Voiliers		Total				
	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	Value-Valeur
Barrington Passage, N.S.	4	86			4	86	5	132			5	132			
Campbellton, N.B.							1	20			1	20			
Canso, N.S.	1	20			1	20	1	20			1	20	1	32	1,500
Caraquet, N.B.			6	163	6	163			6	163	6	163			
Charlottetown, P.E.I.	1	20			1	20	7	107	3	183	10	290			
Chatham, N.B.	8	104	5	177	13	281	8	104	5	177	13	281			
Collingwood, Ont.	4	2,031			4	2,031	1	30			1	30			
Digby, N.S.	3	95			3	95	3	70			3	70			
Halifax, N.S.	4	157	1	15	5	172	4	157	1	15	5	172	5	1,905	10,000
Kenora, Ont.	2	30			2	30	2	30			2	30			
Lunenburg, N.S.	13	579	3	290	16	869	13	579	3	290	16	869	12	1,107	110,000
Midland, Ont.	3	69	2	62	5	131	5	3,111	3	2,700	8	5,811			
Montreal, Que.	1	115	8	1,302	9	1,417	25	33,234	12	5,672	37	38,906	5	10,970	289,090
New Westminster, B.C.	32	676	5	575	37	1,251	33	706	5	574	38	1,280			
Owen Sound, Ont.	1	8			1	8									
Parrsboro, N.S.	1	72			1	72	1	72	1	498	2	570	2	609	400
Paspebiac, Que.	1	15			1	15	1	15			1	15			
Pictou, N.S.							1	33			1	33			
Port Arthur, Ont.							1	22			1	22			
Prince Rupert, B.C.	35	379	5	200	40	579	35	379	5	200	40	579			
Quebec, Que.	4	346	7	1,057	11	1,403	11	2,744	1	33	12	2,777			
St. Andrews, N.B.	1	10			1	10	2	20			2	20			
St. Catharines, Ont.	1	47			1	47	2	48			2	48			
Port Stanley, Ont.	1	22			1	22	1	22			1	22			
Sault Ste. Marie, Ont.			1	166	1	166			1	166	1	166			
Shelburne, N.S.	8	465			8	465	3	316			3	316	3	92	108,500
Sorel, Que.							1	2			1	2			
Sydney, N.S.	2	84			2	84	2	84			2	84			
Toronto, Ont.	6	175	1	67	7	242	2	63	1	67	3	130	1	97	20,000
Vancouver, B.C.	4	46	2	160	6	206	117	1,931	21	2,155	138	4,086	1	69	25,000
Victoria, B.C.	33	576	9	480	42	1,056	35	3,112	10	500	45	3,612	1	1,426	35,000
Weymouth, N.S.	2	16			2	16	3	70			3	70			
Winnipeg, Man.			2	596	2	596	3	58	2	596	5	654			
Windsor, Ont.	1	1,196			1	1,196	5	2,768	1	98	6	2,866			
Yarmouth, N.S.	2	155			2	155	2	155			2	155			
Total	179	7,594	57	5,310	236	12,904	336	50,214	81	14,087	417	64,301	31	16,307	599,490

No. 3.—STATEMENT showing the Trade via St. Lawrence River (Sea-going Vessels) Inwards and Outwards.

N°3.—ÉTAT du commerce *via* le fleuve Saint-Laurent par long-courriers déclarés à l'entrée et à la sortie.

—	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes
Inwards—à l'entrée	1,341	5,396,489	2,943,850	178,675
Outwards—à la sortie	1,449	5,099,091	6,022,419	400,633
Total trade—Total du commerce	2,790	10,495,580	8,966,269	479,308

No. 4.—Statement of Vessels, British, Canadian and Foreign entered Inwards *from Sea*, at each Port and Outport

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British-Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage
1	Albert, N.B.										
2	Alert Bay, B.C.										
3	Amherst, N.S.										
4	Amherst Harbour, Que.										
5	Anyox, B.C.										
6	Annapolis Royal, N.S.						1	226	324	330	5
7	Arichat, N.S.						17	242	175		80
8	Baddeck, N.S.										
9	Bamfield, B.C.						2	62	18		6
10	Barrington Passage, N.S.						3	33	20		9
11	Bathurst, N.B.						70	1,864	2,778		318
12	Bear River, N.S.										
13	Belleveau's Cove, N.S.						4	878	7	5	22
14	Bonne Esperance, Que.	21	6,537	270		477					
15	Bridgewater, N.S.						4	1,495	1,566		31
16	Britannia Beach, B.C.										
17	Butedale, B.C.						47	1,061	2,544		198
18	Campbellton, N.B.	1	1,866	1,535		28	1	296	511		7
19	Campobello, N.B.						113	348	147		133
20	Canning, N.S.						1	58			4
21	Canso, N.S.	2	154	292		14	2	494	759		13
22	Caraquet, N.B.						112	1,981	9,103		516
23	Charlottetown, P.E.I.	5	265	21	2	23	11	6,755	5,109	89	139
24	Chatham, N.B.										
25	Chemainus, B.C.						3	117	3		21
26	Chester, N.S.						22	291	270		75
27	Cheticamp, N.S.										
28	Chicoutimi, Que.										
29	Church Point, N.S.						1	58	1		3
30	Clark's Harbour, N.S.						7	394	589		26
31	Clementsport, N.S.						3	297	4	4	15
32	Dalhousie, N.B.										
33	Digby, N.S.						3	314	209		14
34	Freeport, N.S.						11	729	388		38
35	Gaspé, Que.	2	2,792	6,000		60	2	593	1,400		20
36	Georgetown, P.E.I.	1	1,188		567	24					
37	Glace Bay, N.S.						29	1,151			83
38	Guysboro, N.S.										
39	Hantsport, N.S.										
40	Halifax, N.S.	597	1,809,696	210,859		52,359	320	418,630	371,793		9,128
41	Hillsboro, N.B.										
42	Isaac's Harbour, N.S.										
43	Joggin Mines, N.S.	22	873	410		68					
44	Kentville, N.S.										
45	Kingsport, N.S.	2	710	898		12					
46	Ladner, B.C.										
47	Ladysmith, B.C.						1	229	289		15
48	La Have, N.S.						55	6,723	7,289		915
49	Levis, Que.	1	3,249	325		46					
50	Liverpool, N.S.	39	954	1,740		301	5	1,211	1,406		36
51	Lockeport, N.S.	1	40	51		4	13	513	72		179
52	Lord's Cove, N.B.						73	427	86		148
53	Louisburg, N.S.	14	7,129	7,884		267	12	502	444		100
54	Lower East Pubnico, N.S.						1	31	31		3
55	Lunenburg, N.S.	12	2,067	3,931		80	212	21,893	24,648		3,476
56	Mahone Bay, N.S.						5	508	700		83
57	Maitland, N.S.										
58	Margaretsville, N.S.										
59	Meteghan River, N.S.										
60	Moncton, N.B.						2	679	1,352		12
61	Montague, P.E.I.										
62	Montreal, Que.	454	2,089,917	951,068	128,366	55,529	129	373,493	495,834	5,569	5,006
63	Moose Factory, Ont.	1	1,487		296	50					
64	Murray Harbour, P.E.I.	1	38	20		2	2	42	6		7
65	Nanaimo, B.C.						1	1,464	404		26
66	Newcastle, N.B.										
67	New Westminster, B.C.						11	822	1,150		79
68	North Head, N.B.						75	10,638	516		767
69	North Sydney, N.S.	142	186,261	28,300		6,179					
70	Ocean Falls, B.C.	1	3,525	200		48					
71	Parrsboro, N.S.						1	148	212		5
72	Paspebiac, Que.										

N° 4.—ÉTAT des long-courriers britanniques, canadiens et étrangers déclarés à l'entrée à chaque port et port secondaire

Foreign-Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
					1	1,500	22	2	352	12	5	1,382	29	1
											58	37,449	767	2
								2	196	12				3
					1	396	33							4
4	9,330	4,907		120				4	2,088	110	1	13	2	5
3	1,494	610	614	48				2	178	8	15	7,470	240	6
10	162	35		78				2	40	10				7
					3	56	12	21	3,056	171	22	21,340	458	8
								5	302	29	1	8	2	9
1	74	60		19							5	260	55	10
2	1,677	3,720		38							2	1,928	17	11
					5	9,850	132	3	562	20				12
								6	1,059	31				13
					6	1,760	131				1	870	17	14
								6	2,929	43	18	18,036	369	15
9	19,444	4,995		269	1	2,689	32				16	34,511	475	16
10	216	18		58				19	1,927	92	45	1,232	238	17
1	1,892	2,750		30	1	1,399	23				4	4,872	89	18
43	661	47		101				298	27,826	1,993	387	8,115	1,247	19
														20
1	136	500		8	48	7,002	979	102	14,941	2,024	60	7,040	574	21
														22
8	7,471	11,359		162	2	1,662	31	1	94	6	8	18,377	422	23
3	4,210	3,951	1,728	66	2	5,343	67	2	2,552	38	2	2,311	44	24
5	3,925	6,702		110	2	5,428	88	113	28,536	757	94	70,840	1,016	25
								4	62	16				26
											14	13,079	261	27
2	2,135	3,903		39										28
														29
											30	673	94	30
								3	347	16				31
											1	778	18	32
1	682	1,510		18				10	406	30	9	3,012	104	33
											13	193	34	34
1	261	500		8	13	26,678	868	2	836	38	3	2,794	69	35
1	943	1,181		20	3	250	16	4	50	10	2	2,637	47	36
								3	73	21				37
											3	3,353	63	38
								1	888	14	1	111	4	39
316	1,211,213	299,952		38,953	15	22,794	432	38	16,412	363	141	58,323	5,180	40
											16	10,395	274	41
								1	10	3	25	554	201	42
1	160	300		35										43
								1	80	3				44
														45
								1	14	7	2	418	5	46
								177	79,037	1,493	70	45,873	1,247	47
								13	4,026	116				48
2	5,327	919		70										49
39	1,780	2,230		659				6	555	59	3	2,195	34	50
								3	127	35	3	152	26	51
8	102	18		16				548	9,655	1,498	285	3,156	595	52
91	8,852	11,960		924	4	10,337	151	15	10,856	211	9	5,782	199	53
								1	33	6	27	1,607	559	54
2	159	380		8	3	228	23	25	2,874	274	10	1,113	114	55
					1	99	6							56
											4	1,459	24	57
								2	567	17				58
								2	361	11	1	204	6	59
1	352	436		6							3	1,849	34	60
					7	438	32							61
289	671,976	986,416	17,032	7,819	114	336,046	3,906	5	10,727	180	213	594,588	7,028	62
														63
					1	38	6	2	42	12				64
15	6,785	8,427		224	6	13,296	198	33	4,406	220	699	117,490	5,038	65
					2	6,570	84				2	2,442	42	66
8	14,177	7,874		226	34	118,674	1,559	11	15,653	228	108	341,556	3,800	67
6	99	86		12				174	18,614	1,295	55	566	111	68
1	19	40		6	425	64,385	3,123	63	21,443	769	237	80,761	8,318	69
4	5,327	2,505	25,000	83										70
1	498	750		16	1	1,399	20	39	8,218	192	26	14,814	306	71
3	4,788	8,340		75										72

No. 4.—STATEMENT of Vessels, British, Canadian and Foreign entered Inwards *from Sea*, at each Port and Outport—*Concluded*

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British-Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage
73	Pictou, N.S.	2	169	24		12					
74	Pointe au Pic, Que.										
75	Port Alberni, B.C.						3	4,392	817		78
76	Port Alfred, Que.	3	7,088	14,994		90	12	12,402	24,448		218
77	Port Elgin, N.B.										
78	Port George, N.S.										
79	Port Hastings, N.S.										
80	Port Hawkesbury, N.S.	14	1,674	372		215	23	3,450	741		462
81	Port Mulgrave, N.S.										
82	Port Wade, N.S.										
83	Port Williams, N.S.										
84	Powell River, B.C.										
85	Prince Rupert, B.C.	2	192	30		28	1,040	64,103	4,148		6,343
86	Pugwash, N.S.										
87	Quatsino, B.C.						17	13,190	22,783		368
88	Quebec, Que.	264	1,841,854	133,568	27,598	61,597	60	120,602	20,493	10	2,195
89	Richibucto, N.B.										
90	Rimouski, Que.										
91	Riverport, N.S.						35	4,029	5,270		637
92	St. Andrews, N.B.						227	2,162	316		493
93	St. George, N.B.						2	7	1		4
94	St. John, N.B.	115	580,406	102,282	50,292	14,013	211	155,120	93,493		2,543
95	St. Peters, N.S.										
96	St. Stephen, N.B.						1	483	916		7
97	Salmon River, N.S.	1	73	26		8	1	31		15	4
98	Sandy Point, N.S.	1	100	250		7	3	666	807		19
99	Sheet Harbour, N.S.										
100	Shelburne, N.S.	2	217	300		19	2	366	372		30
101	Sherbrooke, N.S.										
102	Shippegan, N.B.						23	332	790		95
103	Sidney, B.C.						9	4,347	2,450		115
104	Sorel, Que.	1	3,015	428		46					
105	Souris, P.E.I.	2	158	8		10	1	47	6		5
106	Steveston, B.C.						6	299	49		28
107	Stewart, B.C.						1	3	10		1
108	Summerside, P.E.I.						2	952	1,684		14
109	Sydney, N.S.	32	48,719	82,195		812	7	6,905	5,675		213
110	Three Rivers, Que.	9	18,851	21,169		267					
111	Union Bay, B.C.						1	183	209		9
112	Vancouver, B.C.	130	678,359	166,149	60,909	13,689	764	1,310,433	667,185	35,755	48,477
113	Victoria, B.C.	75	450,715	3,897	2,424	10,548	587	798,873	16,164	753	40,069
114	Wallace, N.S.										
115	Westport, N.S.						5	609	713		22
116	Weymouth, N.S.						4	992	297		21
117	White Rock, B.C.						4	164	920		24
118	Windsor, N.S.	11	21,667	116		275	6	1,890	3,787		40
119	Winnipeg, Man.	1	1,487	1,541		71					
120	Wolfeville, N.S.						6	1,127	2,600		30
121	Yarmouth, N.S.						155	115,866	14,675		10,054
122	York Factory, Man.	1	1,487		296	50					
	Total	1,985	7,774,979	1,741,153	270,750	217,328	4,605	3,481,715	1,823,916	42,530	134,379

N° 4.—ÉTAT des long-courriers britanniques, canadiens et étrangers déclarés à l'entrée à chaque port et port secondaire—*Fin*

Foreign-Étrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
					1	1,425	26				7	4,667	135	73
											1	671	17	74
4	5,692	2,468		116	4	13,614	137	3	12	8	21	59,234	680	75
16	39,295	56,800		460							3	6,748	82	76
								1	10	2	2	48	8	77
											1	498	16	78
											1	203	20	79
					12	854	67	7	1,686	47	6	2,753	119	80
								1	452	7	1	1,387	10	81
								5	381	19				82
											1	932	20	83
49	44,191	22,717	3	1,416	15	56,678	725				51	98,286	1,535	84
996	56,804	13,658		7,022	20	63,582	697	98	77,886	3,955	103	37,585	785	85
					1	1,459	23				3	2,128	57	86
6	19,636	13,405		207	1	2,999	29				6	22,677	259	87
43	111,251	97,031	100	1,470	11	27,176	579				39	117,641	2,945	88
											4	3,149	68	89
					3	4,922	77	49	56,232	1,013	16	18,805	352	90
					1	25	3	2	169	27				91
224	4,702	5,816		446				762	35,740	3,068	286	3,415	561	92
								9	127	21	33	909	88	93
183	362,205	189,925	1,160	9,626	24	65,807	953	103	21,528	415	332	150,462	2,501	94
											5	4,576	102	95
7	3,643	6,045		47				8	152	17	3	77	8	96
								2	428	12				97
52	3,324	654		1,051	1	100	7	3	1,147	19	39	2,487	820	98
											9	8,323	83	99
35	2,258	457		675				3	183	24	35	2,713	681	100
								3	1,186	22	13	13,121	274	101
2	631	1,130		16										102
7	7,971	2,484		114				52	9,916	436	451	136,199	6,486	103
6	19,523	32,416		214										104
3	2,816	4,463		59	6	459	29				1	30	4	105
1	59	20		4				35	2,572	191	44	1,138	157	106
3	3,831	180		98				64	49,041	2,407	1	1,527	25	107
6	5,879	11,691		118							2	1,570	38	108
106	249,900	639,895		3,358	60	123,351	1,837	35	58,514	872	38	49,012	886	109
21	61,540	87,528		689	10	41,899	641	15	52,988	570	5	8,234	136	110
6	240	23		34	7	21,683	263	5	1,116	60	19	5,306	205	111
447	1,304,484	480,714	8,918	17,349	205	729,393	9,106	356	215,626	7,018	455	1,235,955	15,913	112
519	1,065,340	18,290	9,774	36,350	24	64,100	953	300	97,408	4,654	674	889,059	22,225	113
											1	1,109	8	114
3	51	2		4				11	343	31	13	154	35	115
					1	757	19	9	1,843	58	8	2,622	75	116
								18	1,208	76	3	42	4	117
13	11,423	14,860		245	63	124,096	1,575	14	7,654	129	74	66,826	1,266	118
								1	356	21				119
														120
45	121,169	2,028		6,296				29	2,566	199	97	5,533	1,089	121
														122
3,695	5,494,185	3,082,081	64,329	137,808	1,171	1,982,696	29,720	3,778	991,480	37,891	5,669	4,515,792	100,674	

No. 5.—Statement of Vessels, British, Canadian and Foreign, entered Inwards *from Sea*

ABSTRACT BY COUNTRIES

No.	Countries from which arrived — Pays de depart	With Cargoes—Chargés									
		British-Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight Tons weight — Poids du fret en tonnes	Freight, Tons, measurement — Mesurage du fret en tonnes	Crew — Equipage
1	Great Britain	836	4,705,538	812,590	190,762	135,736	74	133,691	63,347	731	1,685
2	Australia	38	270,291	46,197	11,364	7,625	26	94,353	15,018	1,990	1,079
3	British East Africa	1	1,830	4,792		29					
4	British South Africa	3	8,868	20,846		108					
5	British West Africa	11	40,897	67,035		551					
6	British Honduras										
7	British India	20	74,844	28,200		1,521					
8	British West Indies	22	33,336	55,067	4,793	759	165	282,153	142,490	560	5,209
9	Fiji	4	14,555	28,266	251	195					
10	Gibraltar										
11	Hong Kong	18	154,108	27,268	20,206	4,148					
12	Irish Free State										
13	Jamaica						1	3,336	3,552		42
14	Newfoundland	343	416,870	85,171	2	13,587	97	66,583	21,274	10	2,615
15	New Zealand	9	54,312	307	205	1,461	7	23,558	1,104	138	294
16	Trinidad										
17	Argentina	29	75,198	168,401		955					
18	Azores and Madeira										
19	Belgium	55	425,381	43,191	19,437	14,709	56	147,253	97,308	2,239	2,058
20	Brazil	2	4,771	11,694		60					
21	Canary Islands										
22	Chile										
23	China	14	126,024	594	158	3,699					
24	Colombia	6	26,484	57,800		206	21	117,346	255,600		806
25	Costa Rica										
26	Cuba	4	8,820	13,940		120					
27	Denmark										
28	Dutch Guiana										
29	Dutch West Indies	8	30,516	53,655		378					
30	Ecuador	4	11,792	24,435		154	1	5,244	12,000		41
31	Egypt										
32	France	10	46,571	13,335	2,655	790					
33	French Africa										
34	French Oceania										
35	Germany	35	185,099	18,634	14,721	4,734					
36	Greece										
37	Hawaii										
38	Hayti	1	1,194	3,271		25					
39	Honduras										
40	Italy	3	9,654	3,993		133					
41	Japan	20	111,956	5,262	5,629	2,406	22	194,298	24,197	36,252	11,952
42	Mexico	3	8,334	10,700		141					
43	Miquelon and St. Pierre	10	1,270	758		75	12	5,632	1,019		273
44	Netherlands	20	112,551	8,832		1,337					
45	Norway										
46	Panama										
47	Peru	1	4,414	10,000		35	23	136,856	322,050		962
48	Porto Rico										
49	Portugal						1	139	159		6
50	Portuguese Africa										
51	Russia										
52	San Domingo	1	1,584	3,331		26					
53	Spain	3	3,078	7,100		56					
54	Sweden										
55	United States	206	738,245	72,200	567	15,658	2,202	2,209,894	814,601	610	92,902
56	Uruguay										
57	Venezuela	4	13,975	23,232		188					
58	From Sea	27	29,297			1,960	10	388	75		39
59	Sea Fisheries	214	23,322	11,056		3,763	1,887	60,991	50,122		14,416
	Total	1,985	7,774,979	1,741,153	270,750	217,328	4,605	3,481,715	1,823,916	42,530	134,379

N° 5.—ÉTAT des long-courriers britanniques, canadiens et étrangers, déclarés à l'entrée

RELEVÉ PAR PAYS

Foreign-Etrangers					In Ballast—Sur lest									
					British — Britanniques			Canadian — Canadiens			Foreign — Etrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Equipage	No.
123	224,063	375,181	610	3,349	242	745,533	9,511	67	108,599	1,610	55	121,512	1,672	1
1	2,722	.....	25	38	15	55,281	664	.....	.....	.....	12	36,221	403	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
3	10,490	15,204	.....	98	3	8,654	107	.....	.....	.....	4	14,984	157	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
1	1,273	3,248	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
90	102,261	117,617	1,548	2,114	4	9,717	129	4	5,057	91	.....	.....	.....	8
.....	.....	.....	.....	.....	2	7,261	97	.....	.....	.....	.....	.....	.....	9
.....	.....	.....	.....	.....	3	7,543	104	.....	.....	.....	3	10,443	117	10
.....	.....	.....	.....	.....	2	8,300	122	.....	.....	.....	.....	.....	.....	11
.....	.....	.....	.....	.....	3	9,359	118	.....	.....	.....	.....	.....	.....	12
3	12,525	8,710	.....	154	1	4,198	46	.....	.....	.....	2	3,264	32	13
90	240,848	583,146	1,728	2,779	345	80,839	3,413	125	86,698	1,981	69	65,010	1,343	14
.....	.....	.....	.....	.....	4	13,212	171	1	3,540	48	.....	.....	.....	15
1	3,899	7,000	.....	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
24	75,127	64,769	.....	862	2	5,514	59	.....	.....	.....	4	11,655	122	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	810	19	18
29	119,313	46,134	375	1,236	3	8,614	103	.....	.....	.....	11	40,319	429	19
2	6,001	187	.....	63	.....	.....	.....	.....	.....	.....	1	2,485	27	20
.....	.....	.....	.....	.....	1	2,951	39	.....	.....	.....	.....	.....	.....	21
10	33,748	34,910	.....	375	.....	.....	.....	.....	.....	.....	.....	.....	.....	22
22	110,241	12,697	3,368	1,725	8	35,394	471	.....	.....	.....	7	23,431	258	23
26	121,312	279,179	.....	895	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
.....	.....	.....	.....	.....	1	2,127	25	.....	.....	.....	.....	.....	.....	25
11	19,236	46,000	.....	291	2	5,718	78	.....	.....	.....	.....	.....	.....	26
56	273,796	81,380	410	9,157	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
2	2,343	5,190	.....	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
1	3,587	5,758	.....	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
1	2,673	6,650	.....	30	5	16,983	186	.....	.....	.....	2	6,443	65	31
50	191,700	15,358	1,790	4,556	4	12,939	154	.....	.....	.....	29	35,539	1,181	32
3	10,329	2,740	.....	118	10	31,704	340	.....	.....	.....	5	18,134	199	33
.....	.....	.....	.....	.....	.....	.....	.....	1	1,199	21	2	1,361	29	34
91	359,404	50,123	9,547	8,620	2	7,462	96	.....	.....	.....	18	59,114	765	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	8,125	96	36
.....	.....	.....	.....	.....	2	5,378	64	.....	.....	.....	1	3,412	35	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
3	2,735	7,000	.....	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
18	76,466	7,893	.....	869	28	81,013	920	.....	.....	.....	32	111,802	1,143	40
114	632,976	13.907	.....	13,353	50	172,988	1,968	5	17,504	440	170	644,061	7,259	41
5	17,390	39,854	.....	171	1	334	17	1	520	18	.....	.....	.....	42
23	6,045	1,336	.....	572	56	4,403	278	70	8,454	440	128	33,958	3,872	43
72	377,224	36,470	4,997	7,203	12	40,502	495	2	6,653	84	70	220,105	2,468	44
39	187,337	42,223	.....	5,311	.....	.....	.....	.....	.....	.....	3	7,555	113	45
1	2,615	2,630	.....	33	2	5,978	80	1	168	12	1	2,957	46	46
3	6,041	6,724	.....	101	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	1	143	6	.....	.....	.....	48
5	10,373	3,360	.....	126	3	7,738	94	.....	.....	.....	1	2,103	21	49
.....	.....	.....	.....	.....	2	6,089	70	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	8,320	302	51
14	15,861	43,604	.....	338	.....	.....	.....	.....	.....	.....	.....	.....	.....	52
14	23,598	17,693	.....	338	2	3,085	36	.....	.....	.....	3	10,492	108	53
30	172,868	60,830	.....	4,643	.....	.....	.....	.....	.....	.....	1	807	17	54
1,577	1,995,432	1,021,654	26,125	58,023	199	565,869	7,872	3,288	732,862	30,620	4,504	2,941,492	67,392	55
1	2,326	168	.....	26	.....	.....	.....	.....	.....	.....	1	2,327	26	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
1	40	2	.....	13	7	259	77	18	1,681	104	113	9,711	951	58
1,135	37,967	15,552	.....	10,030	145	9,957	1,716	194	18,402	2,640	411	57,840	10,007	59
3,695	5,494,185	3,082,081	64,329	137,808	1,171	1,982,696	29,720	3,778	991,480	37,891	5,669	4,515,792	100,674	

No. 5.—Statement of Vessels, British, Canadian and Foreign, entered inwards *from Sea—Concluded*

RECAPITULATION

With cargo — Chargés	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage du fret en tonnes	Crew — Equipage
British—Britanniques	1,985	7,774,979	1,741,153	270,750	217,328
Canadian—Canadiens	4,605	3,481,715	1,823,916	42,530	134,379
Foreigh—Etrangers	3,695	5,494,185	3,082,081	64,329	137,808
Total	10,285	16,750,879	6,647,150	377,609	489,515

N° 5.—ÉTAT des long-courriers britanniques, canadiens et étrangers, déclarés, à l'entrée—*fin*.

RÉCAPITULATION

In Ballast — Sur lest	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage du fret en tonnes	Crew — Équipage
British—Britanniques	1,171	1,982,696	.....	.....	29,720
Canadian—Canadiens	3,778	991,480	.....	.....	37,891
Foreign—Étrangers	5,669	4,515,792	.....	.....	100,674
Total	10,618	7,489,968	.....	.....	168,285
Grand total	20,903	24,240,847	6,647,150	377,609	657,800

No. 6.—Statement of Vessels, British, Canadian and Foreign, entered Outwards *for Sea* at each Port and Outport

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Tons measurement — Mesurage du fret en tonnes	Crew — Équipage
1	Albert, N.B.	1	1,500			22	4	886			22
2	Alert Bay, B.C.										
3	Amherst, N.S.						2	196	924		12
4	Amherst Harbour, Que.	1	396	500		23					
5	Anyox, B.C.						54	76,602	149,411		1,113
6	Annapolis Royal, N.S.						5	883	1,780	1,975	27
7	Arichat, N.S.										
8	Baddeck, N.S.						14	2,916	2,504		143
9	Bamfield, B.C.						3	106	8		10
10	Barrington Passage, N.S.										
11	Bathurst, N.B.						3	1,378	2,450		32
12	Bear River, N.S.	5	9,850	27,000		132	5	946		1,600	25
13	Belliveau's Cove, N.S.						15	2,534		5,702	73
14	Bonne Esperance, Que.	21	6,677	584		486					
15	Bridgewater, N.S.						21	9,269	15,012		145
16	Britannia Beach, B.C.	1	2,689	1,035		32					
17	Buctouche, N.B.										
18	Butedale, B.C.										
19	Campbellton, N.B.	5	8,958	3,500	87	133	3	1,111		385	22
20	Campobello, N.B.						44	167	201		54
21	Canso, N.S.	6	2,609	1,839	1,750	42	1	435	178	144	7
22	Caraquet, N.B.										
23	Charlottetown, P.E.I.	22	18,073	3,471	48	403	12	11,331	1,280	73	293
24	Chatham, N.B.	2	3,194		7,332	54	3	2,521		5,480	32
25	Chemainus, B.C.	12	39,904		18,203	499	37	34,404	1,346	99,934	251
26	Chester, N.S.										
27	Cheticamp, N.S.										
28	Church Point, N.S.						3	386		920	12
29	Clark's Harbour, N.S.										
30	Clementsport, N.S.						6	363	545	616	19
31	Dalhousie, N.B.										
32	Digby, N.S.						18	588	743		44
33	Freeport, N.S.						9	315	360		31
34	Gaspé, Que.	1	40		200	4	7	2,833		3,600	55
35	Georgetown, P.E.I.	2	119	124		10	4	398	343		19
36	Glace Bay, N.S.						8	173			31
37	Guysboro, N.S.	1	1,455		1,575	22	1	827	2,400	3,675	19
38	Halifax, N.S.	700	1,871,666	150,696	9,215	59,468	339	290,590	228,214	12,310	10,166
39	Hantsport, N.S.						1	316			6
40	Hillsboro, N.S.										
41	Isaac's Harbour, N.S.	1	119	185		6					
42	Joggin Mines, N.S.	22	873			55					
43	Kentville, N.S.						1	80		72	3
44	Ladner, B.C.										
45	Ladysmith, B.C.	1	552	849		24	102	25,825	42,399		71
46	La Have, N.S.						3	716	1,058		20
47	Liverpool, N.S.						52	3,410	5,081		370
48	Lockeport, N.S.						14	603	200		177
49	Lord's Cove, N.B.						178	1,093	2,428		335
50	Louisburg, N.S.	19	18,895	10,529		468	11	21,070	32,223		308
51	Lower East Pubnico, N.S.										
52	Lunenburg, N.S.	3	383	430		19	24	3,617	4,269		173
53	Mabou, N.S.										
54	Mahone Bay, N.S.						2	238	190		12
55	Maitland, N.S.						9	3,395	6,993		60
56	Margaretsville, N.S.						3	804	825	550	22
57	Moncton, N.B.	1	1,457	2,680		23	2	818	1,500		15
58	Montague, P.E.I.	9	601	737		43					
59	Montreal, Que.	556	2,435,486	2,874,711	241,666	58,875	112	248,617	258,331	44,891	4,214
60	Moose Factory, Ont.	1	1,487			58					
61	Murray Harbour, P.E.I.										
62	Nanaimo, B.C.	26	82,614	11,444	9,564	1,050	39	18,161	9,059	2,396	544
63	Newcastle, N.B.										
64	New Westminster, B.C.	36	123,277	78,243		1,614	16	24,372	14,807		338
65	North East Harbour, N.S.										
66	North Head N.B.						183	14,876	1,475		1,107
67	North Sydney, N.S.	379	208,958	73,822		7,389	50	15,490	26,989		494
68	Ocean Falls, B.C.	15	56,483	15,552		710	55	76,564	69,142	11,000	1,329
69	Parrsboro, N.S.	3	3,977	5,965		65	69	19,38	29,082		393
70	Pictou, N.S.	3	2,311	2,025		51					

N° 6.—TABLEAU des navires britanniques, canadiens et étrangers *allant à la mer*, entrés à chaque port et port secondaire

Foreign—Étrangers					In Ballast—Lèges									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	No.
6	1,689			35										1
17	36,386	63,916		515							40	914	251	2
														3
														4
1	1,527	2,572		25				29	31,130	129	4	7,816	97	5
17	8,466	16,970	18,640	273										6
10	162	35		78				24	386	117				7
34	53,640	49,250	35,000	670	3	56	12	8	160	44				8
								4	73	15	1	8	2	9
4	107	78		28				3	33	9	2	157	42	10
3	2,665	5,410		37				60	875	285				11
														12
1	19		40	2				2	31	12				13
1	870	235		17	6	1,690	124							14
28	27,655	58,162		558										15
21	46,843	59,542		642							4	7,142	66	16
2	1,396		5,841	35										17
								55	3,308	262	65	1,534	306	18
16	18,616		2,965	357										19
63	561	589		124				323	36,779	2,043	119	6,530	282	20
5	4,790	7,465		53	47	6,897	962	96	13,554	1,923	56	1,869	542	21
								113	2,000	521				22
19	19,521	15,029	29	376				3	104	13	3	4,927	160	23
13	14,239	5,619	26,337	271										24
63	162,445	4,517	181,826	1,496				92	5,616	760	67	11,165	655	25
								25	348	86				26
14	13,079	29,900		261										27
														28
5	25	389	74	73				6	84	30				29
														30
1	778	2,886		17										31
14	4,050	20	8,000	151										32
11	171	57		28										33
9	8,826		13,500	190	1	2,028	60	1	33	5	1	213	18	34
5	6,121	6,276		91				4	75	12				35
								22	944	67				36
13	12,345	25,437	85,736	266										37
458	1,275,898	135,921	7,476	43,983	11	15,657	249	67	153,626	1,420	9	4,341	120	38
														39
16	10,278	34,029		274										40
9	134	91		26				1	10	3	25	554	204	41
1	160	250	250	4										42
														43
1	380	300		12							1	38	5	44
54	52,680	15,221		1,385				72	3,442	548	18	2,350	76	45
								36	3,370	609				46
44	7,091	10,209		734				9	653	63				47
9	257	127		54										48
205	2,409	3,439		424				403	12,561	1,332	62	707	128	49
12	14,206	29,231		326				9	111	33	87	2,404	107	50
3	228	10		65							24	1,379	494	51
3	1,229	1,175		26	3	236	23	260	21,946	4,189	8	451	108	52
1	905	1,800		21										53
								3	282	57				54
														55
														56
3	1,849	3,675		36										57
														58
387	1,066,881	2,254,576	95,993	12,725	24	75,427	988	29	133,654	1,053	65	188,062	1,948	59
														60
					2	76	12	4	84	19				61
669	220,035	59,334	30,043	5,854	2	81	24	96	12,080	611	82	5,947	493	62
					1	499	7				6	6,081	112	63
111	345,652	195,684		3,877				8	5,025	103	4	7,027	97	64
								1	12	5				65
41	417	280		83				94	14,383	1,000	15	187	30	66
42	17,104	42,056		796	179	66,283	2,256	44	10,191	402	198	77,314	7,494	67
1	51	5		13							3	5,273	70	68
21	14,242	21,423		297										69
10	10,287	6,333		198	1	73	6							70

No. 6.—STATEMENT of Vessels, British, Canadian and Foreign, entered Outwards *for Sea* at each Port and Outport—*Concluded*

No.	Ports and Outports — Ports et ports secondaires	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Tons measurement — Mesurage du fret en tonnes	Crew — Équipage
71	Pointe au Pic, Que										
72	Port Alberni, B.C.	8	26,423	994	17,604	276					
73	Port Alfred, Que	12	20,099	45,478		319					
74	Port Clyde, N.S.						1	238	280		6
75	Port Elgin, N.B.										
76	Port Hastings, N.S.										
77	Port Hawkesbury, N.S.										
78	Port Mulgrave, N.S.						1	452	168	140	7
79	Port Wade, N.S.						6	644	1,385	1,655	26
80	Port Williams, N.S.						1	286	320		14
81	Powell River, B.C.	15	56,678	10,398		745					
82	Prince Rupert, B.C.	20	63,315	173,859		699	54	74,042	4,275		3,379
83	Pugwash, N.S.	2	2,203		1,613	41	4	1,433		4,638	24
84	Quatsino, B.C.						2	1,133	207		38
85	Quebec, Que.	131	863,205	181,247	757	29,412	36	59,679	8,323	26	1,320
86	Richibucto, N.B.						1	78		130	5
87	Rimouski, Que.	2	3,249	4,118		49	49	56,232	92,127		1,013
88	Riverport, N.S.										
89	St. Andrews, N.B.						249	2,110	2,231		499
90	St. George, N.B.						3	39	16	64	6
91	St. John, N.B.	108	531,812	359,047	58,028	13,211	107	51,113	49,995	52,896	718
92	St. Peters, N.S.										
93	St. Stephen, N.B.						3	90	66		6
94	Salmon River, N.S.						2	272		469	9
95	Sandy Point, N.S.	2	199	500		13	3	862	1,141		18
96	Sheet Harbour, N.S.										
97	Shelburne, N.S.	4	793	595		45	4	1,547	659		38
98	Sherbrooke, N.S.	2	1,119		320	20	4	1,522	973	414	29
99	Shippegan, N.B.										
100	Sidney, B.C.						23	3,990	2,845	178	192
101	Sorel, Que.	2	560	395		27					
102	Souris, P.E.I.	8	617	520	21	39					
103	Steveston, B.C.						13	491	302		50
104	Stewart, B.C.						1	1,238	2,031		24
105	Summerside, P.E.I.	1	440	457		7	2	560	777		13
106	Sydney, N.S.	73	166,507	319,102		2,421	47	97,753	152,250		1,386
107	Three Rivers, Que.	10	41,899	8,150		641	6	20,993	18,770		202
108	Truro, N.S.						5	1,141	820		24
109	Union Bay, B.C.	40	129,012	32,315		1,611	13	24,685	8,070		415
110	Vancouver, B.C.	307	1,274,275	1,389,555	43,219	20,683	540	988,209	137,533	15	49,399
111	Victoria, B.C.	27	199,399	6,260	577	6,987	371	436,875	33,495	1	19,564
112	Wallace, N.S.										
113	Westport, N.S.						5	156	70		14
114	Weymouth, N.S.	1	757	1,524		19	17	4,326		10,027	103
115	White Rock, B.C.						9	929	2,712		34
116	Windsor, N.S.	74	145,763	418,051		1,799	24	12,043	19,360	715	204
117	Winnipeg, Man.	1	1,487	1,541		71					
118	Yarmouth, N.S.						123	110,328	10,151		8,540
119	York Factory, Man.	1	1,487	216		50					
	Total	2,706	8,435,906	6,220,243	411,779	210,975	3,276	2,877,100	1,464,502	266,691	109,967

N° 6.—TABLEAU des navires britanniques, canadiens et étrangers *allant à la mer*, entrés à chaque port et port secondaire—*Fin*

Foreign—Étrangers					In Ballast—Lèges									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	No.
3	2,142	4,970	.....	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
39	126,506	.....	126,558	1,378	.....	.....	.....	5	5,867	107	1	4	2	72
18	29,692	57,167	.....	439	.....	.....	.....	.....	.....	.....	3	6,464	81	73
1	1,460	1,119	.....	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
2	63	25	.....	8	.....	.....	.....	1	10	2	.....	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	203	20	76
.....	.....	.....	.....	.....	14	1,674	215	28	4,176	479	12	9,720	225	77
2	2,503	1,905	.....	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
3	2,583	3,557	.....	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
89	115,109	55,872	.....	2,637	.....	.....	.....	.....	.....	.....	11	29,368	349	81
26	40,153	60,347	.....	578	2	192	28	1,093	92,115	8,096	1,068	60,633	7,261	82
5	4,097	.....	6,731	98	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
5	18,712	6,445	.....	183	.....	.....	.....	1	229	15	3	12,584	114	84
60	192,721	176,055	.....	2,617	7	45,505	1,286	2	987	37	20	42,109	911	85
8	5,417	.....	10,725	114	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
16	18,805	29,054	.....	352	1	1,673	28	.....	.....	.....	.....	.....	.....	87
.....	.....	.....	.....	.....	.....	.....	.....	30	3,020	558	.....	.....	.....	88
418	6,615	9,832	.....	874	.....	.....	.....	592	34,818	3,114	99	1,491	212	89
18	979	531	1,634	46	.....	.....	.....	4	12	8	17	319	52	90
379	421,972	385,4[illegible]9	67,005	10,057	10	35,806	798	142	4,846	330	87	25,919	701	91
13	12,106	21,250	.....	265	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
2	73	35	.....	7	.....	.....	.....	.....	.....	.....	5	2,795	35	93
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
56	6,370	3,355	.....	1,098	.....	.....	.....	1	32	8	39	2,515	828	95
20	18,142	24,142	.....	415	.....	.....	.....	.....	.....	.....	.....	.....	.....	96
37	2,423	492	.....	697	.....	.....	.....	6	312	57	36	2,307	657	97
21	21,782	43,685	398	451	.....	.....	.....	.....	.....	.....	.....	.....	.....	98
1	905	674	.....	20	.....	.....	.....	26	365	105	1	317	9	99
5	4,245	1,845	.....	85	.....	.....	.....	22	3,484	188	458	145,389	6,640	100
3	7,345	3,598	.....	96	.....	.....	.....	.....	.....	.....	1	2,987	31	101
2	1,461	1,550	.....	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	102
37	1,067	519	.....	126	.....	.....	.....	3	204	14	8	190	36	103
1	1,527	2,217	.....	25	.....	.....	.....	16	5,641	254	5	6,924	155	104
3	4,189	4,501	.....	71	.....	.....	.....	.....	.....	.....	.....	.....	.....	105
132	274,691	471,127	.....	4,048	12	16,196	326	2	36	10	88	188,995	2,498	106
6	10,844	4,030	.....	169	10	20,700	291	10	34,130	404	20	58,990	616	107
1	475	360	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	108
9	18,577	5,453	.....	298	.....	.....	.....	4	157	32	24	1,319	155	109
700	2,175,892	1,735,547	12,800	28,538	25	123,552	1,901	540	436,916	13,578	188	354,864	4,986	110
197	415,569	76,901	72	10,261	30	130,145	2,493	474	573,435	24,636	945	1,474,456	46,583	111
1	1,109	.....	617	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	112
14	195	74	.....	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	113
8	4,431	7,596	.....	111	.....	.....	.....	2	106	14	.....	.....	.....	114
3	42	128	.....	6	.....	.....	.....	6	174	24	.....	.....	.....	115
95	80,843	187,706	1,020	1,568	.....	.....	.....	.....	.....	.....	.....	.....	.....	116
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	117
79	122,887	5,692	.....	6,435	.....	.....	.....	41	2,934	540	53	4,030	935	118
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119
5,035	7,666,084	6,564,318	739,310	152,309	391	544,446	12,089	5,057	1,670,969	70,390	4,162	2,779,282	87,999	

No. 7—Statement of Vessels, British, Canadian and Foreign, entered Outwards *for Sea*

ABSTRACT BY COUNTRIES

No.	Countries to which Departed — Pays de destination	With Cargoes—Chargés									
		British—Britanniques					Canadian—Canadiens				
		Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Tons measurement — Mesurage du fret en tonnes	Crew — Équipage
1	Great Britain	848	4,185,316	2,847,345	239,929	104,540	80	197,480	251,786	23,767	2,596
2	Australia	38	268,895	38,880	16,593	7,712	23	80,594	62,109	17,980	921
3	British South Africa	22	84,202	86,853	30,848	1,156					
4	British West Africa	4	15,602	10,527	12,327	204					
5	British Guiana	5	6,393	2,600		214	36	91,745	40,644		1,626
6	British Honduras						8	17,568	11,211		464
7	British India	3	11,421	8,300		186					
8	British West Indies	9	14,476	8,234	3,804	206	68	111,010	65,938	20,116	1,942
9	British Oceania	5	17,743	2,420	7,224	246					
10	Fiji Islands										
11	Gibraltar	1	4,088	9,309		38					
12	Hong Kong	20	164,868	72,251	8,167	4,339	8	70,688	23,674		4,365
13	Irish Free State	12	36,814	67,250	536	471					
14	Newfoundland	569	463,246	133,5 2	3,181	15,500	219	162,510	156,594	4 7	4,[illegible]24
15	New Zealand	32	120,572	27,593	33,345	1,974	20	66,696	51,488	12,444	832
16	rgentina										
17	Belgium	70	304,283	360,313	494	8,261	19	45,204	8,128	26	672
18	Brazil	1	2,418	3,167	1,429	30	3	964			20
19	Cnile										
20	China	4	22,349	6,925		640	3	26,555	6		1,637
21	Colombia	1	2,024	4,649		29					
22	Cuba	24	46,674	32,902		1,107	3	1,028		2,401	20
23	Denmark	3	5,633	14,140		83					
24	Ecuador										
25	Egypt	3	9,429	639	1,078	205					
26	France	15	60,185	83,597	272	1,490					
27	French Africa	1	2,451	5,947		35					
28	Fren h Oceania										
29	Germany	138	482,331	842,210	723	8,122	3	16,487	15,584		235
30	Greece	5	14,660	34,241		157					
31	Greenland										
32	Italy	20	52,154	116,941		615					
33	Japan	45	211,226	95,148	22,492	4,533	15	105,320	33,768	1	5,199
34	Lettonia	1	1,819	4,450		28					
35	Mexico						1	58	13		7
36	Morocco										
37	Netherlands	92	270,786	608,905		3,213	2	6,654	14,831	50	84
38	Norway										
39	Peru										
40	Poland	1	3,042	7,593		31					
41	Porto Rico	1	200	350		6	20	2,601	3,386		119
42	Portugal	10	28,084	73,608		338	1	134	250		7
43	Russia										
44	Saint Pierre	44	7,574	5,231	34	411	30	9,078	2,558	630	378
45	Sea Fisheries	252	21,362	24		6,240	192	22,075	2,550		4,747
46	Spain	1	3,210	7,500		39					
47	Sweden	4	7,402	18,558		116					
48	United States	371	1,444,998	577,442	29,303	36,319	2,522	1,842,651	719,984	88,809	79,372
49	Uruguay	3	8,246	679		122					
50	Venezuela										
51	For Sea	28	29,730			2,019					
	Total	2,706	8,435,906	6,220,243	411,779	210,975	3,276	2,877,100	1,464,502	266,691	109,967

RECAPITULATION

With Cargoes — Chargés	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage du f et en tonnes	Crew — Équipage
Britis'—Britanniques	2,706	8,435,906	6,220,243	411,779	210,975
Canadian—Canadiens	3,276	2,877,100	1,464,502	266,691	109,967
Foreign—Étrangers	5,035	7,666,084	6,564,318	739,310	152,309
Total	11,017	18,979,090	14,249,063	1,417,780	73,251

N° 7.—ÉTAT des long-courriers britanniques, canadiens et étrangers *déclarés à la sortie*

RELEVÉ PAR PAYS

Foreign—Étrangers					In Ballast—Lèges									
					British — Britanniques			Canadian — Canadiens			Foreign — Étrangers			
Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	No.
206	464,712	467,017	40,928	5,765	13	37,967	882	36	41,222	575	29	71,029	798	1
24	72,270	11,865	19,117	841	1	3,208	33	.....	.....	.....	2	5,725	63	2
13	36,824	20,001	5,463	437	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
36	40,452	27,320	.....	860	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
59	81,881	68,414	6,009	1,415	.....	.....	.....	7	1,644	40	.....	.....	.....	8
5	13,912	.....	11,647	166	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
3	1,930	3,392	.....	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
2	5,668	13,648	.....	59	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
87	102,986	91,925	5,518	1,789	64	28,229	782	48	7,963	327	71	196,832	2,233	14
17	51,992	24,856	4,872	561	1	2,633	38	.....	.....	.....	.....	.....	.....	15
28	89,633	21,395	.....	924	.....	.....	.....	.....	.....	.....	3	8,766	92	16
58	198,240	324,553	.....	2,405	3	8,279	108	.....	.....	.....	.....	.....	.....	17
5	12,679	8,030	10,176	165	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
3	8,823	3,355	123	95	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
37	185,540	96,417	205	2,831	6	40,293	613	.....	.....	.....	4	33,492	904	20
21	37,509	14,275	.....	622	4	17,656	140	27	146,316	1,028	1	4,352	34	21
32	41,891	33,716	.....	884	.....	.....	.....	.....	.....	.....	1	37	6	22
39	102,028	128,377	284	1,857	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	2	5,896	78	.....	.....	.....	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25
45	140,671	244,383	2,634	1,733	.....	.....	.....	.....	.....	.....	3	571	45	26
1	4,293	8,540	.....	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	865	19	28
165	499,506	868,103	7,646	6,135	2	3,418	63	.....	.....	.....	1	1,596	20	29
17	45,680	104,359	.....	467	1	2,780	29	.....	.....	.....	.....	.....	.....	30
.....	.....	.....	.....	.....	1	1,077	34	.....	.....	.....	2	1,886	39	31
130	461,646	943,170	272	4,738	.....	.....	.....	.....	.....	.....	2	6,367	76	32
265	1,111,713	853,934	82,758	15,316	11	80,530	1,649	2	17,672	1,075	41	221,731	5,233	33
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34
3	12,810	2,751	.....	103	2	6,276	82	4	1,297	38	17	71,900	559	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	70	17	36
108	330,208	564,586	7,897	3,857	5	13,225	133	.....	.....	.....	1	1,971	26	37
50	127,644	203,351	41,320	2,085	.....	.....	.....	.....	.....	.....	2	3,209	46	38
5	13,874	5,234	.....	167	.....	.....	.....	14	79,899	573	1	5,978	42	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
1	2,986	6,522	.....	52	2	5,116	61	.....	.....	.....	1	2,886	52	42
3	12,480	1,407	.....	462	.....	.....	.....	.....	.....	.....	1	317	9	43
50	11,216	14,582	.....	983	15	1,532	115	78	7,764	604	20	3,473	375	44
748	48,915	8,345	.....	9,549	181	13,505	2,211	1,943	64,761	14,407	658	60,656	11,606	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
28	96,667	79,439	7,294	2,086	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
2,698	3,172,175	1,294,398	485,147	81,639	66	258,840	4,783	2,867	1,301,931	51,607	3,205	2,066,961	65,338	48
5	12,995	2,604	.....	171	.....	.....	.....	.....	.....	.....	1	3,510	34	49
.....	.....	.....	.....	.....	4	13,727	179	.....	.....	.....	1	3,237	40	50
38	11,635	54	.....	1,022	7	259	76	31	500	116	92	1,865	293	51
5,035	7,666,084	6,564,318	739,310	152,309	391	544,446	12,089	5,057	1,670,969	70,390	4,162	2,779,282	87,999	

RÉCAPITULATION

In Ballast — Sur lest	Vessels — Navires	Tons Register — Tonnage enregistré	Freight, tons Weight — Poids du fret en tonnes	Freight, tons Measurement — Mesurage de fret en tonnes	Crew — Équipage
British—Britanniques	391	544,446	.....	.....	12,089
Canadian—Canadiens	5,057	1,670,969	.....	.....	70,390
Foreign—Étrangers	4,162	2,779,282	.....	.....	87,999
Total	9,610	4,994,697	.....	.....	170,478
Grand total	20,627	23,973,787	14,249,063	1,417,780	643,729

No. 8.—Summary Statement of Sea-going Vessels entered and cleared at each Port and Outport

RECAPITULATION BY PORTS AND OUTPORTS

N° 8.—État sommaire des arrivages et des départs des long-courriers à chaque port et port secondaire

RÉCAPITULATION PAR PORTS ET PORTS SECONDAIRES

Ports and Outports — Ports et ports secondaires	Vessels Arrived — Arrivage des navires						Vessels Departed — Départ des navires					
	British — Britanniques		Foreign — Étrangers		Total — Total		British — Britanniques		Foreign — Étrangers		Total — Total	
	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes
Albert, N.B.	3	1,852	5	1,382	8	3,234	5	2,386	6	1,689	11	4,075
Alert Bay, B.C.	.....	.....	58	37,449	58	37,449	.....	.....	57	37,300	57	37,300
Amherst, N.S.	2	196	.....	.....	2	196	2	196	.....	.....	2	196
Amherst Harbour, Que.	1	396	.....	.....	1	396	1	396	.....	.....	1	396
Anyox, B.C.	4	2,088	5	9,343	9	11,431	83	107,732	5	9,343	88	117,075
Annapolis Royal, N.S.	3	404	18	8,964	21	9,368	5	883	17	8,466	22	9,349
Arichat, N.S.	19	282	10	162	29	444	24	386	10	162	34	548
Baddeck, N.S.	24	3,112	22	21,340	46	24,452	25	3,132	34	53,640	59	56,772
Bamfield, B.C.	7	364	1	8	8	372	7	179	1	8	8	187
Barrington Passage, N.S.	3	33	6	334	9	367	3	33	6	264	9	297
Bathurst, N.B.	70	1,864	4	3,605	74	5,469	63	2,253	3	2,665	66	4,918
Bear River, N.S.	8	10,412	.....	.....	8	10,412	10	10,796	.....	.....	10	10,796
Belliveau's Cove, N.S.	10	1,937	.....	.....	10	1,937	17	2,565	1	19	18	2,584
Bonne Esperance, Que.	27	8,297	1	870	28	9,167	27	8,367	1	870	28	9,237
Bridgewater, N.S.	10	4,424	18	18,036	28	22,460	21	9,269	28	27,655	49	36,924
Britannia Beach, B.C.	1	2,689	25	53,955	26	56,644	1	2,689	25	53,985	26	56,674
Buctouche, N.B.	.....	.....	.....	.....	.....	.....	.....	.....	2	1,396	2	1,396
Butedale, B.C.	66	2,988	55	1,448	121	4,436	55	3,308	65	1,534	120	4,842
Campbellton, N.B.	3	3,561	5	6,764	8	10,325	8	10,069	16	18,616	24	28,685
Campobello, N.B.	411	28,174	430	8,776	841	36,950	367	36,946	182	7,091	549	44,037
Canning, N.S.	1	58	.....	.....	1	58	.....	.....	.....	.....	.....	.....
Canso, N.S.	154	22,591	61	7,176	215	29,767	150	23,495	61	6,659	211	30,154
Caraquet, N.B.	112	1,981	.....	.....	112	1,981	113	2,000	.....	.....	113	2,000
Charlottetown, P.E.I.	19	8,776	16	25,848	35	34,624	37	29,508	22	24,448	59	53,956
Chatham, N.B.	4	7,895	5	6,521	9	14,416	5	5,715	13	14,239	18	19,954
Chemainus, B.C.	118	34,081	99	74,765	217	108,846	141	79,924	130	173,610	271	253,534
Chester, N.S.	26	353	.....	.....	26	353	25	348	.....	.....	25	348
Cheticamp, N.S.	.....	.....	14	13,079	14	13,079	.....	.....	14	13,079	14	13,097
Chicoutimi, Que.	.....	.....	2	2,135	2	2,135	.....	.....	.....	.....	.....	.....
Church Point, N.S.	1	58	.....	.....	1	58	3	386	.....	.....	3	386
Clark's Harbour, N.S.	7	394	30	673	37	1,067	6	84	5	25	11	109
Clementsport, N.S.	6	644	.....	.....	6	644	6	363	.....	.....	6	363
Dalhousie, N.B.	.....	.....	1	778	1	778	.....	.....	1	778	1	778
Digby, N.S.	13	720	10	3,694	23	4,414	18	588	14	4,050	32	4,638
Freeport, N.S.	11	729	13	193	24	922	9	315	11	171	20	486
Gaspé, Que.	19	30,899	4	3,055	23	33,954	10	4,934	10	9,039	20	13,973
Georgetown, P.E.I.	8	1,488	3	3,580	11	5,068	10	592	5	6,121	15	6,713

Glace Bay, N.S.	32	1,224			32	1,224	30	1,117			30	1,11
Guysboro, N.S.			3	3,353	3	3,353	2	2,282	13	12,345	15	14,627
Hantsport, N.S.	1	888	1	111	2	999	1	316			1	316
Halifax, N.S.	970	2,267,532	457	1,269,536	1,427	3,537,068	1,117	2,331,539	467	1,280,239	1,584	3,611,778
Hillsboro, N.B.			16	10,395	16	10,395			16	10,278	16	10,278
Isaac's Harbour, N.S.	1	10	25	554	26	564	2	129	34	688	36	817
Joggin Mines, N.S.	22	873	1	160	23	1,033	22	873	1	160	23	1,033
Kentville, N.S.	1	80			1	80	1	80			1	80
Kingsport, N.S.	2	710			2	710						
Ladner, B.C.	1	14	2	418	3	432			2	418	2	418
Ladysmith, B.C.	178	79,266	70	45,873	248	125,139	175	29,819	72	55,030	247	84,849
La Have, N.S.	68	10,749			68	10,749	39	4,086			39	4,086
Levis, Que.	1	3,249	2	5,327	3	8,576						
Liverpool, N.S.	50	2,720	42	3,975	92	6,695	61	4,063	44	7,091	105	11,154
Lockeport, N.S.	17	680	3	152	20	832	14	603	9	257	23	860
Lords Cove, N.B.	621	10,082	293	3,258	914	13,340	581	13,654	267	3,116	848	16,770
Louisburg, N.S.	45	28,824	100	14,634	145	43,458	39	40,076	99	16,610	138	56,686
Lower East Pubnico, N.S.	2	64	27	1,607	29	1,671			27	1,607	27	1,607
Lunenburg, N.S.	252	27,062	12	1,272	264	28,334	290	26,182	11	1,680	301	27,862
Mabou, N.S.									1	905	1	905
Mahone Bay, N.S.	6	607			6	607	5	520			5	520
Maitland, N.S.			4	1,459	4	1,459	9	3,395			9	3,395
Margaretsville, N.S.	2	567			2	567	3	804			3	804
Meteghan River, N.S.	2	361	1	204	3	565						
Moncton, N.B.	2	679	4	2,201	6	2,880	3	2,275	3	1,849	6	4,124
Montague, P.E.I.	7	438			7	438	9	601			9	601
Montreal, Que.	702	2,810,183	502	1,266,564	1,204	4,076,747	721	2,893,184	452	1,254,943	1,173	4,148,127
Moose Factory, Ont.	1	1,487			1	1,487	1	1,487			1	1,487
Murray Harbour, P.E.I.	6	160			6	160	6	160			6	160
Nanaimo, B.C.	40	19,166	714	124,275	754	143,441	163	112,936	751	225,982	914	338,918
Newcastle, N.B.	2	6,570	2	5,442	4	9,012	1	499	6	6,081	7	6,580
New Westminster, B.C.	56	135,149	116	335,733	172	490,882	60	152,674	115	352,679	175	505,353
North East Harbour, N.S.							1	12			1	12
North Head, N.B.	249	29,252	61	665	310	29,917	277	29,259	56	604	333	29,863
North Sydney, N.S.	630	272,089	238	80,780	868	352,869	652	300,922	240	94,418	892	395,340
Ocean Falls, B.C.	1	3,525	4	5,327	5	8,852	70	133,047	4	5,324	74	138,371
Parrsboro, N.S.	41	9,765	27	15,312	68	25,077	72	23,365	21	14,242	93	37,607
Paspebiac, Que.			3	4,788	3	4,788						
Pictou, N.S.	3	1,594	7	4,667	10	6,261	4	2,384	10	10,287	14	12,671
Pointe au Pic, Que.			1	671	1	671			3	2,142	3	2,142
Port Alberni, B.C.	10	18,018	25	64,926	35	82,944	13	32,290	40	126,510	53	158,800
Port Alfred, Que.	15	19,490	19	46,043	34	65,533	12	20,099	21	36,156	33	56,255
Port Clyde, N.S.							1	238	1	1,460	2	1,698
Port Elgin, N.B.	1	10	2	48	3	58	1	10	2	63	3	73
Port George, N.S.			1	498	1	498						
Port Hastings, N.S.			1	203	1	203			1	203	1	203
Port Hawkesbury, N.S.	56	7,664	6	2,753	62	10,417	42	5,850	12	9,720	54	15,570
Port Mulgrave, N.S.	1	452	1	1,387	2	1,839	1	452	2	2,503	3	2,955
Port Wade, N.S.	5	381			5	381	6	644			6	644
Port Williams, N.S.			1	93	1	932	1	286	3	2,583	4	2,869
Powell River, B.C.	15	56,678	100	142,477	115	199,155	15	56,678	100	144,477	115	201,155
Prince Rupert, B.C.	1,160	205,763	1,099	94,389	2,259	300,152	1,169	229,664	1,094	100,786	2,263	330,450
Pugwash, N.S.	1	1,459	3	2,128	4	3,587	6	3,641	5	4,097	11	7,738
Quatsino, B.C.	18	16,189	12	42,313	30	58,502	3	1,362	8	31,296	11	32,658
Quebec, Que.	335	1,989,632	82	288,892	417	2,218,524	176	969,376	80	234,830	256	1,204,206
Richibucto, N.B.			4	3,149	4	3,149	1	78	8	5,417	9	5,495
Rimouski, Que.	52	61,154	16	18,805	68	79,959	52	61,154	16	18,805	68	79,959
Riverport, N.S.	38	4,223			38	4,223	30	3,020			30	3,020
St. Andrews, N.B.	989	37,902	510	8,117	1,499	46,019	841	36,928	517	8,106	1,358	45,034
St. George, N.B.	11	134	33	909	44	1,043	7	51	35	1,298	42	1,349

No. 8.—Summary Statement of Sea-going Vessels entered and cleared at each Port and Outport—*Concluded*

RECAPITULATION BY PORTS AND OUTPORTS

N° 8.—État sommaire des arrivages et des départs des long-courriers à chaque port et port secondaire—*Fin*

RÉCAPITULATION PAR PORTS ET PORTS SECONDAIRES

Ports and Outports — Ports et ports secondaires	Vessels Arrived — Arrivage des navires						Vessels Departed — Départ des navires					
	British — Britanniques		Foreign — Étrangers		Total — Total		British — Britanniques		Foreign — Étrangers		Total — Total	
	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes	No. — Nomb.	Tons — Tonnes
St. John, N.B.	453	822,861	515	512,667	968	1,335,528	367	623,577	466	447,891	833	1,071,468
St. Peters, N.S.	.....	.....	5	4,576	5	4,576	.....	.....	13	12,106	13	12,106
St. Stephen, N.B.	9	635	10	3,720	19	4,355	3	90	7	2,868	10	2,958
Salmon River, N.S.	4	532	.....	.....	4	532	2	272	.....	.....	2	272
Sandy Point., N.S.	8	2,013	91	5,811	99	7,824	6	1,093	95	8,885	101	9,978
Sheet Harbour, N.S.	.....	.....	9	8,323	9	8,323	.....	.....	20	18,142	20	18,142
Shelburne, N.S.	7	766	70	4,971	77	5,737	14	2,652	73	4,730	87	7,382
Sherbrooke, N.S.	3	1,186	13	13,121	16	14,307	6	2,641	21	21,782	27	24,423
Shippegan, N.B.	23	332	2	631	25	963	26	365	2	1,222	28	1,587
Sidney, B.C.	61	14,263	461	144,170	522	158,433	45	7,474	463	149,634	508	157,108
Sorel, Que.	1	3,015	6	19,523	7	22,538	2	560	4	10,332	6	10,892
Souris, P.E.I.	9	664	4	2,846	13	3,510	8	617	2	1,461	10	2,078
Steveston, B.C.	41	2,871	45	1,197	86	4,068	16	695	45	1,257	61	1,952
Stewart, B.C.	65	49,044	4	5,358	69	54,402	17	6,879	6	8,451	23	15,330
Summerside, P.E.I.	2	952	8	7,449	10	8,401	3	1,000	3	4,189	6	5,189
Sydney, N.S.	134	237,489	144	298,912	278	536,401	134	280,492	220	463,686	354	744,178
Three Rivers, Que.	34	113,738	26	69,774	60	183,512	36	117,722	26	69,834	62	187,556
Truro, N.S.	.....	.....	.....	.....	.....	.....	5	1,141	1	475	6	1,616
Union Bay, B.C.	13	22,982	25	5,546	38	28,528	57	153,854	33	19,896	90	173,750
Vancouver, B.C.	1,455	2,933,811	902	2,540,439	2,357	5,474,250	1,412	2,822,952	888	2,530,756	2,300	5,353,708
Victoria, B.C.	986	1,411,096	1,193	1,954,399	2,179	3,365,495	902	1,339,854	1,142	1,890,025	2,044	3,229,879
Wallace, N.S.	.....	.....	1	1,109	1	1,109	.....	.....	1	1,109	1	1,109
Westport, N.S.	16	952	16	205	32	1,157	5	156	14	195	19	351
Weymouth, N.S.	14	3,592	8	2,622	22	6,214	20	5,189	8	4,431	28	9,620
White Rock, B.C.	22	1,372	3	42	25	1,414	15	1,103	3	42	18	1,145
Windsor, N.S.	94	155,307	87	78,249	181	233,556	98	157,806	95	80,843	193	238,649
Winnipeg, Man.	2	1,843	.....	.....	2	1,843	1	1,487	.....	.....	1	1,487
Wolfville, N.S.	6	1,127	.....	.....	6	1,127	.....	.....	.....	.....	.....	.....
Yarmouth, N.S.	184	118,432	142	126,702	326	245,134	164	113,262	132	126,917	296	240,179
York Factory, Man.	1	1,487	.....	.....	1	1,487	1	1,487	.....	.....	1	1,487
Total	11,539	14,230,870	9,364	10,009,977	20,903	24,240,847	11,430	13,528,421	9,197	10,445,366	20,627	23,973,787

No. 9.—Statement of Nationalities of Sea-going Vessels entered and cleared
N° 9.—État des nationalités des long-courriers, arrivés et partis

ABSTRACT BY NATIONALITIES—RÉSUMÉ PAR NATIONALITÉS

Arrived—Arrivés			Departed—Partis		
Flag—Pavillon	Number — Nombre	Tons — Tonnes	Flag—Pavillon	Number — Nombre	Tons — Tonnes
Great Britain	11,539	14,230,870	Great Britain	11,430	13,528,421
Belgium	2	3,618	Belgium	2	3,618
China	22	83,567	China	25	88,604
Denmark	181	553,286	Denmark	197	565,658
Finland	1	2,889	Finland	1	2,889
France	394	319,002	France	367	309,410
Germany	67	261,697	Germany	73	272,245
Greece	20	55,819	Greece	31	86,311
Guatemala	1	865	Guatemala	2	1,209
Italy	176	638,028	Italy	209	739,319
Japan	326	1,421,183	Japan	345	1,502,119
Jugo Slavia	7	25,102	Jugo Slavia	8	28,398
Mexico	2	6,474	Mexico	3	6,749
Netherlands	141	572,013	Netherlands	141	547,532
Norway	836	1,593,258	Norway	955	1,787,097
Panama	2	1,779	Panama	1	914
Peru	2	2,464	Peru	3	3,759
Portugal	4	6,189	Portugal	2	3,133
Russia	3	12,480	Russia	5	13,666
Spain	20	35,154	Spain	22	41,696
Sweden	143	385,578	Sweden	137	385,065
United States	7,012	4,026,964	United States	6,666	4,053,407
Undocumented	2	2,568	Undocumented	2	2,568
Total	20,903	24,240,847	Total	20,627	23,973,787

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

Arrived—Arrivés	Steamers — Vapeurs		Sailing Vessels — Voiliers		Total		Departed—Partis	Steamers — Vapeurs		Sailing Vessels — Voiliers		Total	
	Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes		Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes	Number — Nombre	Tons — Tonnes
British—Britanniques	9,737	13,951,962	1,802	278,908	11,539	14,230,870	British—Britanniques	9,607	13,264,323	1,823	264,098	11,430	13,528,421
Foreign—Étrangers	8,553	9,756,041	811	253,936	9,364	10,009,977	Foreign—Étrangers	8,447	10,265,341	750	180,025	9,197	10,445,366
Total	18,290	23,708,003	2,613	532,844	20,903	24,240,847	Total	18,054	23,529,664	2,573	444,123	20,627	23,973,787

No. 10.—Summary Statement of Sea-going Vessels entered Inwards and Outwards

N° 10.—État sommaire des long-courriers déclarés à l'entrée et à la sortie

Nationalities — Nationalités	Sea-going Vessels, Inwards — Long-courriers à l'entrée					Sea-going Vessels, Outwards — Long-courriers à la sortie					Total Sea-going Vessels, Inwards and Outwards — Total des long-courriers à l'entrée et à la sortie				
	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Freight, Tons weight — Poids du fret en tonnes	Freight, Tons measurement — Mesurage du fret en tonnes	Crew — Équipage
British—Britanniques	3,156	9,757,675	1,741,153	270,750	247,048	3,097	8,980,352	6,220,243	411,779	223,064	6,253	18,738,027	7,961,396	682,529	470,112
Canadian—Canadiens.	8,383	4,473,195	1,823,916	42,530	172,270	8,333	4,548,069	1,464,502	266,691	180,357	16,716	9,021,264	3,288,418	309,221	352,627
Foreign—Étrangers...	9,364	10,009,977	3,082,081	64,329	238,482	9,197	10,445,366	6,564,318	739,310	240,308	18,561	20,455,343	9,646,399	803,639	478,790
Total.....	20,903	24,240,847	6,647,150	377,609	657,800	20,627	23,973,787	14,249,063	1,417,780	643,729	41,530	48,214,634	20,896,213	1,795,389	1,301,529

No. 11.—SUMMARY STATEMENT of Vessels arrived and departed (exclusive of Coasting Vessels)

N° 11.—ÉTAT SOMMAIRE des arrivages et des départs des navires (à l'exclusion des cabotiers)

Nationalities — Nationalités	Sea-going Vessels, Inwards and Outwards — Long-courriers, à l'entrée et à la sortie			Vessels of the Inland Waters between Canada and the United States — Navires des eaux intérieures, entre le Canada et les Etats-Unis			Total Shipping (Exclusive of Coasting Vessels), Inwards and Outwards — Nombre total des navires (à l'exclusion des cabotiers), à l'entrée et à la sortie		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons Vessels — Tonnage enregistré	Crew register — Équipage	Crew — Navires	Tons Vessels — Tonnage enregistré	Crew — Équipage
British—Britanniques	6,253	18,738,027	470,112	.....	.....	.....	6,253	18,738,027	470,112
Canadian—Canadiens	16,716	9,021,264	352,627	21,781	19,432,687	561,759	38,497	28,453,951	914,386
Foreign—Étrangers	18,561	20,455,343	478,790	49,210	16,156,476	380,604	67,771	36,611,819	859,394
Total	41,530	48,214,634	1,301,529	70,991	35,589,163	942,363	112,521	83,803,797	2,243,892

TRADE WITH EACH COUNTRY AND NATIONALITY OF VESSELS

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea* at each of the undermentioned Ports and Outports in Canada from Foreign Countries, distinguishing the Nationality of the Vessels employed in the trade with each Country.

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Albert, N.B.—										
Great Britain (a)	1	1,500								
United States (b)	2	352	5	1,382						
Total	3	1,852	5	1,382						
Alert Bay, B.C.—										
United States (a)			42	32,079	2	4,966				
Sea Fisheries (a)			14	404						
Total			56	32,483	2	4,966				
Amherst, N.S.—										
Newfoundland (b)	2	196								
Amherst Harbour, Que.—										
Newfoundland (a)	1	396								
Anyox, B.C.—										
United States (a)	4	2,088	5	9,343						
Annapolis Royal, N.S.—										
Great Britain (a)					1	498				
United States (a)					17	8,466				
United States (b)	3	404								
Total	3	404			18	8,964				
Arichat, N.S.—										
Sea Fisheries (b)	19	282	10	162						
Baddeck, N.S.—										
Newfoundland (b)	14	2,916								
United States (a)					22	21,340				
Sea Fisheries (b)	10	196								
Total	24	3,112			22	21,340				
Bamfield, B.C.—										
From Sea (a)			1	8						
United States (a)	7	364								
Total	7	364	1	8						
Barrington Passage, N.S.—										
United States (a)			3	103						
Sea Fisheries (a)	3	33	3	231						
Total	3	33	6	334						
Bathurst, N.B.—										
Great Britain (b)	2	881								
Norway (a)					2	1,677				
United States (b)			2	1,928						
Sea Fisheries (b)	68	983								
Total	70	1,864	2	1,928	2	1,677				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

COMMERCE AVEC CHAQUE PAYS ET NATIONALITÉ DES NAVIRES

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur déclarés *à l'entrée* à chacun des ports et ports secondaires sous-mentionnés du Canada venant des pays étrangers, et de la nationalité des navires employés dans le commerce avec chaque pays.

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	1,500
													7	1,734
													8	3,234
													44	37,045
													14	404
													58	37,449
													2	196
													1	396
													9	11,431
													1	498
													17	8,466
													3	404
													21	9,368
													29	444
													14	2,916
													22	21,340
													10	196
													46	24,452
													1	8
													7	364
													8	372
													3	103
													6	264
													9	367
													2	881
													2	1,677
													2	1,928
													68	983
													74	5,469

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Bear River, N.S.—										
United States (a)	6	10,203								
United States (b)	2	209								
Total	8	10,412								
Belliveau's Cove, N.S.—										
St. Pierre (b)	1	104								
United States (a)	9	1,833								
Total	10	1,937								
Bonne Espérance, Que.—										
Newfoundland (a)	21	8,004			1	870				
Newfoundland (b)	6	293								
Total	27	8,297			1	870				
Bridgewater, N.S.—										
St. Pierre (a)					1	1,029				
United States (a)					16	15,693				
United States (b)	10	4,424								
Total	10	4,424			17	16,722				
Britannia Beach, B.C.—										
Japan (a)										
United States (a)			22	44,408	1	2,391				
Hawaii (a)	1	2,689								
British West Indies (a)										
Total	1	2,689	22	44,408	1	2,391				
Butedale, B.C.—										
United States (a)	1	251	21	596						
Sea Fisheries (a)	65	2,737	34	852						
Total	66	2,988	55	1,448						
Campbellton, N.B.—										
Great Britain (a)	1	1,399			1	1,284	1	1,354		
Newfoundland (a)					1	948				
United States (a)	1	1,866			2	3,178				
United States (b)	1	296								
Total	3	3,561			4	5,410	1	1,354		
Campobello, N.B.—										
United States (a)	411	28,174	430	8,776						
Canning, N.S.—										
United States (b)	1	58								
Canso, N.S.—										
Great Britain (a)	1	136								
Newfoundland (a)	1	125								
Newfoundland (b)	2	148	1	136						
St. Pierre (b)			1	758						
United States (a)			8	1,451						
United States (b)	3	1,125	5	3,380						
Sea Fisheries (a)	95	15,800	45	1,440						
Sea Fisheries (b)	52	5,257	1	11						
Total	154	22,591	61	7,176						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													6	10,203
													2	209
													8	10,412
													1	104
													9	1,833
													10	1,937
													22	8,874
													6	293
													28	9,167
													1	1,029
1	1,314												17	17,007
													10	4,424
1	1,314												28	22,460
										China	1	3,915	1	3,915
													23	46,799
													1	2,689
										Italy	1	3,241	1	3,241
											2	7,156	26	56,644
													22	847
													99	3,589
													121	4,436
													3	4,037
													1	948
													3	5,044
													1	296
													8	10,325
													841	36,950
													1	58
													1	136
													1	125
													3	284
													1	758
													8	1,451
													8	4,505
													140	17,240
													53	5,268
													215	29,767

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Caraquet, N.B.—										
Sea Fisheries (b)	112	1,981								
Charlottetown, P.E.I.—										
Great Britain (a)					4	6,307				
British West Indies (a)	1	1,900								
British West Indies (b)	3	917								
Newfoundland (a)	1	975			1	597				
Newfoundland (b)	6	495								
United States (a)	1	1,584	3	9,607	5	4,708	1	911		
United States (b)	5	2,882								
Sea Fisheries (b)	2	23								
Total	19	8,776	3	9,607	10	11,612	1	911		
Chatham, N.B.—										
Great Britain (a)	2	5,343								
Newfoundland (a)					1	2,610				
Spain (b)					1	286				
United States (a)	1	1,909			2	2,311				
United States (b)	1	643								
Total	4	7,895			4	5,207				
Chemainus, B.C.—										
Japan (a)					1	2,391				
United States (a)	91	11,272	76	33,937	1	2,494	1	2,709		
United States (b)	27	22,809	19	29,583						
Total	118	34,081	95	63,520	2	4,885	1	2,709		
Chester, N.S.—										
Sea Fisheries (a)	26	353								
Cheticamp, N.S.—										
United States (a)					14	13,079				
Chicoutimi, Que.—										
Great Britain (a)					1	660				
United States (a)										
Total					1	660				
Church Point, N.S.—										
United States (b)	1	58								
Clark's Harbour, N.S.—										
British West Indies (a)	1	310								
United States (a)			30	673						
Sea Fisheries (a)	6	84								
Total	7	394	30	673						
Clementsport, N.S.—										
United States (b)	6	644								
Dalhousie, N.B.—										
United States (a)					1	778				
Digby, N.S.—										
Great Britain (a)					1	682				
British West Indies (b)	1	212								
United States (a)	12	508	3	24	6	2,988				
Total	13	720	3	24	7	3,670				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													112	1,981
													4	6,307
													1	1,900
													3	917
													2	1,572
													6	495
2	3,718												12	20,528
													5	2,882
													2	23
2	3,718												35	34,624
													2	5,343
													1	2,610
													1	286
1	1,314												4	5,534
													1	643
1	1,314												9	14,416
													1	2,391
								1	3,651				170	54,063
													46	52,392
								1	3,651				217	108,846
													26	353
													14	13,079
													1	660
1	1,475												1	1,475
1	1,475												2	2,135
													1	58
													1	310
													30	673
													6	84
													37	1,067
													6	644
													1	778
													1	682
													1	212
													21	3,520
													23	4,414

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Freeport, N.S.—										
British West Indies (b)	1	393								
United States (a)	10	336	13	193						
Total	11	729	13	193						
Gaspé, Que.—										
Great Britain (a)	1	2,330								
British West Indies (a)	1	1,451								
British West Indies (b)	1	323								
Newfoundland (a)	13	24,868	1	1,440						
Spain (a)	1	1,341								
Spain (b)										
United States (a)	2	586	2	1,354						
Total	19	30,899	3	2,794						
Georgetown P.E.I.—										
Newfoundland (b)	3	250								
United States (a)	1	1,188			2	2,399				
Sea Fisheries (b)	4	50								
Total	8	1,488			2	2,399				
Glace Bay, N.S.—										
Great Britain (a)	2	41								
Great Britain (b)	30	1,183								
Total	32	1,224								
Guysboro, N.S.—										
Newfoundland (a)					1	1,462				
United States (a)					1	739	1	1,152		
Total					2	2,201	1	1,152		
Hantsport, N.S.—										
United States (a)	1	888								
United States (b)			1	111						
Total	1	888	1	111						
Halifax, N.S.—										
Great Britain (a)	101	661,964	1	2,935	10	7,928	3	2,918		
British West Indies (a)	44	109,062			16	15,540	34	36,148		
British West Indies (b)	5	969								
Newfoundland (a)	106	160,661			12	7,155				
Newfoundland (b)	45	4,176								
Belgium (a)	24	191,197								
British India (a)	20	74,844								
Cuba (a)							2	2,105		
France (a)										
Germany (a)	2	5,255	3	10,517						
Netherlands (a)										
Norway (a)					22	144,033				
Australia (a)	19	78,246								
San Domingo (a)					1	1,264	1	905		
From Sea (a)	27	29,297								
From Sea (b)	5	1,418								
St. Pierre (a)	27	7,776			1	499				
St. Pierre (b)	6	942								
Spain (a)	2	4,188			1	1,104	3	3,869		
Sweden (a)							20	146,872		
United States (a)	207	726,204	39	36,954	26	29,930	12	51,718		
United States (b)	20	8,904	8	4,202						
Argentina (a)	1	4,110								
Colombia (a)	14	70,045	4	19,014						
Peru (a)	13	75,581								
Ecuador (a)	5	17,036								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	393
													23	529
													24	922
													1	2,330
													1	1,451
													1	323
													14	26,308
													1	1,341
1	261												1	261
													4	1,940
1	261												23	33,954
													3	250
1	1,181												4	4,768
													4	50
1	1,181												11	5,068
													2	41
													30	1,183
													32	1,224
													1	1,462
													2	1,891
													3	3,353
													1	888
													1	111
													2	999
2	7,496	1	378	1	813					Spain	1	498	120	684,930
2	2,368												96	163,118
													5	969
				1	1,128								119	168,944
										Portugal	1	70	46	4,246
													24	191,197
													20	74,844
				1	1,129								3	3,234
		36	91,508										36	91,508
				22	148,643								27	164,415
						19	173,038						19	173,038
													22	144,033
													19	78,246
						1	801						3	2,970
		8	8,928										35	38,225
													5	1,418
		31	8,595	1	291								60	17,161
		2	128										8	1,070
													6	9,161
													20	146,872
5	36,769			2	2,771								291	884,346
													28	13,106
		1	1,882										2	5,992
													18	89,059
										Peru	1	1,169	14	76,750
													5	17,036

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Halifax, N.S.—*Concluded*										
Hayti (a)	1	1,194								
Denmark (a)										
Portugal (a)										
Sea Fisheries (a)	252	32,302	4	394						
Sea Fisheries (b)	24	2,161								
Total	970	2,267,532	59	74,016	89	207,453	75	244,535		
Hillsboro, N.B.—										
United States (a)					14	9,898				
United States (b)			2	497						
Total			2	497	14	9,898				
Isaacs Harbour, N.S.—										
Sea Fisheries (a)	1	10	25	554						
Joggin Mines, N.S.—										
Great Britain (b)	22	873								
United States (b)			1	160						
Total	22	873	1	160						
Kentville, N.S.—										
United States (b)	1	80								
Kingsport, N.S.—										
United States (b)	2	710								
Ladner, B.C.—										
United States (a)	1	14	1	38						
United States (b)			1	380						
Total	1	14	2	418						
Ladysmith, B.C.—										
United States (a)	105	43,229	46	38,015						
United States (b)	73	36,037	23	3,273						
Total	178	79,266	69	41,288						
La Have, N.S.—										
British West Indies (a)	1	33								
British West Indies (b)	5	919								
St. Pierre (b)	2	244								
United States (a)	1	40								
United States (b)	12	5,149								
Sea Fisheries (a)	6	92								
Sea Fisheries (b)	41	4,272								
Total	68	10,749								
Levis, Que.—										
Great Britain (a)	1	3,249			2	5,327				
Liverpool, N.S.—										
British West Indies (b)	1	316								
Newfoundland (b)	1	99								
St. Pierre (a)	6	594								
United States (a)			8	425	1	943				
United States (b)	3	757	2	1,252						
Sea Fisheries (a)	39	954	31	1,355						
Total	50	2,720	41	3,032	1	943				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	1,194
44	237,822												44	237,822
										Portugal	1	147	1	147
		48	15,983							Spain	2	1,177	306	49,856
													24	2,161
53	284,455	127	127,402	28	154,775	20	173,839				6	3,061	1,427	3,537,068
													14	9,898
													2	497
													16	10,395
													26	564
													22	873
													1	160
													23	1,033
													1	80
													2	710
													2	52
													1	380
													3	432
								1	4,585				152	85,829
													96	39,310
								1	4,585				248	125,139
													1	33
													5	919
													2	244
													1	40
													12	5,149
													6	92
													41	4,272
													68	10,749
													3	8,576
													1	316
													1	99
													6	594
													9	1,368
													5	2,009
													70	2,309
													92	6,695

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Lockeport, N.S.—										
United States (a)	1	40								
United States (b)			3	152						
Sea Fisheries (b)	16	640								
Total	17	680	3	152						
Lord's Cove, N.B.—										
United States (a)	621	10,082	293	3,258						
Louisburg, N.S.—										
Great Britain (a)	4	12,158								
Newfoundland (a)	9	8,634			4	2,716				
Newfoundland (b)	10	853								
Belgium (a)										
From Sea (a)	1	31								
St. Pierre (a)										
Sea Fisheries (a)	1	148								
Sea Fisheries (b)	16	407	84	2,123						
United States (a)	3	6,497			1	1,484	1	899		
United States (b)	1	96	4	350						
British South Africa (a)										
Total	45	28,824	88	2,473	5	4,200	1	899		
Lower East Pubnico, N.S.—										
Sea Fisheries (b)	2	64	27	1,607						
Lunenburg, N.S.—										
British West Indies (a)	3	648								
British West Indies (b)	22	3,996								
Newfoundland (a)	3	264	1	5						
Newfoundland (b)	7	850								
From Sea (a)	2	361								
St. Pierre (a)	13	1,119								
United States (a)			1	46						
United States (b)	9	2,762	1	601						
Porto Rico (b)	1	143								
Portugal (b)	1	139								
Sea Fisheries (a)	42	1,777	6	389						
Sea Fisheries (b)	149	15,003								
Total	252	27,062	9	1,041						
Mahone Bay, N.S.—										
British West Indies (b)	1	119								
St. Pierre (b)	1	99								
Sea Fisheries (b)	4	389								
Total	6	607								
Maitland, N.S.—										
United States (b)			4	1,459						
Margaretsville, N.S.—										
United States (a)	1	353								
United States (b)	1	214								
Total	2	567								
Meteghan River, N.S.—										
United States (b)	2	361	1	204						
Moncton, N.B.—										
British West Indies (b)	1	282								
Netherlands (a)					1	1,284				
United States (b)	1	397	3	917						
Total	2	679	3	917	1	1,284				

(a) Steam—Vapeurs. (b) Sai —Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	40
													3	152
													16	640
													20	832
													914	13,340
													4	12,158
													13	11,350
													10	853
		1	2,546										1	2,546
													1	31
		2	320										2	320
		2	606										3	754
													100	2,530
													5	8,880
													5	446
										Italy	1	3,590	1	3,590
		5	3,472								1	3,590	145	43,458
													29	1,671
													3	648
													22	3,996
													4	269
1	113												8	963
													2	361
		2	118										15	1,237
													1	46
													10	3,363
													1	143
													1	139
													48	2,166
													149	15,003
1	113	2	118										264	28,334
													1	119
													1	99
													4	389
													6	607
													4	1,459
													1	353
													1	214
													2	567
													3	565
													1	282
													1	1,284
													4	1,314
													6	2,880

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Montague, P.E.I.—										
Newfoundland (b)	7	438								
Montreal, Que.—										
Great Britain (a)	419	2,011,277			31	54,979	1	1,255		
British West Indies (a)	34	67,430			5	7,551				
Dutch West Indies (a)	5	17,907								
Newfoundland (a)	48	60,579			11	11,364				
Belgium (a)	30	97,799			1	2,019			1	3,071
Argentina (a)	16	42,687								
Cuba (a)	3	5,281			3	4,181				
France (a)	6	26,247			9	24,081				
Germany (a)	15	49,516			18	49,923				
Venezuela (a)	4	13,975								
Netherlands (a)	7	22,544			16	44,992				
Italy (a)	22	63,982			1	3,267				
Norway (a)					10	24,762				
Mexico (a)	2	5,623	2	9,369						
Chile (a)					2	6,843				
San Domingo (a)	1	1,584			2	2,736				
Gibraltar (a)	2	3,834								
Australia (a)	10	36,616								
New Zealand (a)	7	23,558								
Spain (a)										
Denmark (a)					3	2,122				
Sweden (a)					1	2,648				
United States (a)	28	63,143	31	49,536	12	23,500	2	3,708		
United States (b)			58	84,241						
Colombia (a)	11	63,497	22	102,298						
Peru (a)	9	56,602								
Irish Free State (a)	3	9,359								
Portugal (a)	1	2,461								
French Africa (a)	6	17,484								
Egypt (a)	1	2,829								
Greece (a)										
British West Africa (a)	11	40,897								
British South Africa (a)	1	3,472								
British Honduras (a)							1	1,273		
Total	702	2,810,183	113	245,444	125	264,968	4	6,236	1	3,071
Moose Factory, Ont.—										
Great Britain (a)	1	1,487								
Murray Harbour, P.E.I.—										
Sea Fisheries (b)	6	160								
Nanaimo, B.C.—										
Great Britain (a)	2	6,364								
China (a)										
Japan (a)										
United States (a)	27	10,191	612	89,714	1	2,610				
United States (b)	3	2,439	69	22,249						
Sea Fisheries (a)	8	172	29	370						
Total	40	19,166	710	112,333	1	2,610				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	438
13	18,258	9	24,386	1	2,298	24	54,785	.....	.....	Italy.....	5	15,090	511	2,204,426
										Spain.....	3	10,035		
										Greece.....	5	12,063		
6	11,315	.....	.....	1	1,859	.....	.....	.....	.....	.....	.....	.....	46	88,155
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	17,907
.....	.....	1	2,819	.....	.....	1	2,789	.....	.....	.....	.....	.....	61	77,551
.....	.....	.....	.....	1	2,960	4	9,084	.....	.....	Italy.....	4	16,423	42	135,033
										Greece.....	1	3,677		
										Finland....	1	2,889		
1	2,307	1	3,199	.....	.....	.....	.....	.....	.....	Portugal...	1	2,986	21	57,378
										Italy.....	1	3,310		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	3,109	7	12,571
.....	.....	1	2,546	.....	.....	.....	.....	.....	.....	Italy.....	4	13,907	21	69,094
										Greece.....	1	2,313		
										Jugo Slavia	1	3,469		
.....	.....	.....	.....	1	3,669	3	6,480	.....	.....	Greece.....	1	3,176	44	134,114
										Italy.....	5	17,881		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	13,975
.....	.....	1	3,239	.....	.....	35	96,510	.....	.....	Greece.....	3	9,812	77	229,239
										Jugo Slavia	4	14,067		
										Italy.....	11	38,075		
										Spain.....	3	10,129		
										JugoSlavia	1	3,783		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Greece.....	2	6,383	46	148,520
										Italy.....	17	60,976		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	24,762
1	1,547	.....	.....	.....	.....	.....	.....	.....	.....	Mexico.....	2	6,474	7	23,013
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	6,843
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	4,320
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Spain.....	1	3,478	5	14,277
										Greece.....	1	3,437		
										Italy.....	1	3,528		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	36,616
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	23,558
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Spain.....	3	7,143	7	23,395
										Italy.....	4	16,252		
2	3,670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5,792
1	1,475	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4,123
11	17,324	1	2,561	1	2,960	2	4,038	4	18,139	Italy.....	30	103,631	122	288,540
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58	84,241
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33	165,795
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	56,602
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	9,359
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	2	6,528	4	11,092
										Greece.....	1	2,103		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	7	25,933	13	43,417
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	3,663	3	9,272
										Greece.....	1	2,780		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Greece.....	2	4,697	3	8,125
										Italy.....	1	3,428		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	40,897
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,472
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,275
35	55,896	14	38,750	5	13,746	69	173,686	4	18,139	.....	132	446,628	1,204	4,076,747
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,487
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	160
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	6,364
.....	.....	.....	.....	.....	.....	.....	.....	1	2,638	.....	.....	.....	1	2,638
.....	.....	.....	.....	.....	.....	.....	.....	1	3,311	.....	.....	.....	1	3,311
.....	.....	.....	.....	.....	.....	.....	.....	1	3,383	.....	.....	.....	641	105,898
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72	24,688
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37	542
.....	.....	.....	.....	.....	.....	.....	.....	3	9,332	.....	.....	.....	754	143,441

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Newcastle, N.B.—										
Great Britain (a)	2	6,570								
Newfoundland (a)					1	1,854				
United States (a)					1	588				
Total	2	6,570			2	2,442				
New Westminster, B.C.—										
Great Britain (a)	9	26,858	1	3,547	1	2,307				
China (a)	3	9,340			1	3,264				
Japan (a)	10	35,466	1	3,450	3	8,421				
United States (a)	32	60,636	44	118,066	13	34,749	5	13,746		
United States (b)	1	23								
Argentina (a)					1	2,485				
Panama (a)	1	2,826			1	2,957				
Total	56	135,149	46	125,063	20	54,183	5	13,746		
North Head, N.B.—										
United States (a)	248	28,855	61	665						
United States (b)	1	397								
Total	249	29,252	61	665						
North Sydney, N.S.—										
Great Britain (a)	7	10,931								
British West Indies (a)	2	6,346								
Newfoundland (a)	197	213,868	2	38	22	17,792				
Newfoundland (b)	275	24,177	1	75						
Belgium (a)	1	2,713								
France (a)										
Germany (a)										
St. Pierre (a)	7	2,160								
St. Pierre (b)	39	3,011								
Spain (a)	1	280								
Spain (b)	1	354								
Sweden (a)					1	807				
United States (a)	4	1,964			3	2,802				
United States (b)			2	101						
Argentina (a)	1	3,152			1	2,889				
Sea Fisheries (a)	1	136								
Sea Fisheries (b)	94	2,997	1	20						
Total	630	272,089	6	234	27	24,290				
Ocean Falls, B.C.—										
United States (a)			3	5,276						
New Zealand (a)	1	3,525								
Sea Fisheries (a)			1	51						
Total	1	3,525	4	5,327						
Parrsboro, N.S.—										
Great Britain (a)	1	1,399			1	964				
United States (a)	1	353	1	66	11	10,637				
United States (b)	39	8,013	14	3,645						
Total	41	9,765	15	3,711	12	11,601				
Paspebiac, Que.—										
United States (a)			3	4,788						
Pictou, N.S.—										
Great Britain (a)	1	1,425			1	1,609				
Newfoundland (a)					2	1,841				
Newfoundland (b)			1	627						
St. Pierre (b)	2	169								
United States (a)			3	590						
Total	3	1,594	4	1,217	3	3,450				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													2	6,570
													1	1,854
													1	588
													4	9,012
1	2,394									Italy	1	3,241	13	38,347
													4	12,604
2	6,331							28	105,428				44	159,096
4	13,001			1	2,958			6	22,248	Italy	2	7,140	107	272,544
													1	23
													1	2,485
													2	5,783
7	21,726			1	2,958			34	127,676		3	10,381	172	490,882
													309	29,520
													1	397
													310	29,917
													7	10,931
													2	6,346
													221	231,698
										Spain	1	127	277	24,379
													1	2,713
		2	2,729										2	2,729
										Italy	1	3,755	1	3,755
		88	18,008							Spain	1	450	96	20,618
										Spain	1	217	40	3,228
													1	280
													1	354
													1	807
													7	4,766
													2	101
													2	6,041
		108	29,570							Spain	3	1,400	112	31,106
													95	3,017
		198	50,307								7	5,949	868	352,869
													3	5,276
													1	3,525
													1	51
													5	8,852
													2	2,363
													13	11,056
													53	11,658
													68	25,077
													3	4,788
													2	3,034
													2	1,841
													1	627
													2	169
													3	590
													10	6,261

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Pointe au Pie, Que—										
Newfoundland (a)					1	671				
Port Alberni, B.C.—										
Great Britain (a)	1	3,208					2	5,724		
Japan (a)	1	2,991			2	5,878				
United States (a)	5	11,807	11	22,458						
Sea Fisheries (a)	3	12	1	26						
Total	10	18,018	12	22,484	2	5,878	2	5,724		
Port Alfred, Que.—										
Great Britain (a)	3	7,088			3	4,451				
Newfoundland (a)					2	4,521				
France (a)										
Italy (a)					1	2,227				
United States (a)	12	12,402	1	1,596	5	18,485				
Dutch Guina (a)					2	2,343				
Netherlands (a)										
Egypt (a)										
Total	15	19,490	1	1,596	13	32,027				
Port Elgin, N.B.—										
From Sea (b)	1	10								
St. Pierre (b)										
Total	1	10								
Port George, N.S.—										
United States (a)					1	498				
Port Hastings, N.S.—										
United States (a)			1	203						
Port Hawkesbury, N.S.—										
Newfoundland (b)	10	731								
St. Pierre (a)					1	773				
St. Pierre (b)	5	400								
United States (a)			4	951	1	1,029				
United States (b)	2	1,286								
Ses Fisheries (a)	35	5,072								
Sea Fisheries (b)	4	175								
Total	56	7,664	4	951	2	1,802				
Port Mulgrave, N.S.—										
United States (b)	1	452	1	1,387						
Port Wade, N.S.—										
United States (b)	5	381								
Port Williams, N.S.—										
United States (a)					1	932				
Powell River, B.C.—										
United States (a)			92	118,990	3	7,920				
Australia (a)	11	42,337								
New Zealand (a)	2	7,080								
Fiji Islands (a)	2	7,261								
Uruguay (a)					1	2,327				
Argentina (a)			1	3,516	1	2,765				
Brazil (a)					1	2,485				
Total	15	56,678	93	122,506	6	15,497				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	671
													3	8,932
1	3,636							7	24,529				11	37,034
1	2,675												17	36,940
													4	38
2	6,311							7	24,529				35	82,944
													6	11,539
													2	4,521
										Italy	1	2,673	1	2,673
													1	2,227
2	3,557												20	36,040
													2	2,343
						1	3,517						1	3,517
										Italy	1	2,673	1	2,673
2	3,557					1	3,517				2	5,346	34	65,533
													1	10
		2	48										2	48
		2	48										3	58
													1	498
													1	203
													10	731
													1	773
													5	400
													5	1,980
													2	1,286
													35	5,072
													4	175
													62	10,417
													2	1,839
													5	381
													1	932
								1	4,474				96	131,384
													11	42,337
													2	7,080
													2	7,261
													1	2,327
													2	6,281
													1	2,485
								1	4,474				115	199,155

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries waence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Prince Rupert, B.C.—										
Great Britain (a)	12	37,859								
United States (a)	136	141,256	213	44,740			2	7,279		
French Africa (a)	1	3,244								
Japan (a)	4	13,184								
Sea Fisheries (a)	1,007	10,220	880	24,414						
Total	1,160	205,763	1,093	69,154			2	7,279		
Pugwash, N.S.—										
Great Britain (a)	1	1,459								
Newfoundland (a)					1	727				
United States (a)					1	600				
Total	1	1,459			2	1,327				
Quatsino, B.C.—										
Chile (a)					1	2,391				
Japan (a)	1	2,999								
United States (a)	17	13,190	4	14,004						
Total	18	16,189	4	14,004	1	2,391				
Quebec, Que.—										
Great Britain (a)	218	1,550,200	1	230	3	4,050				
British West Indies (a)	19	36,668								
Newfoundland (a)	37	47,781								
Belgium (a)	39	215,793			1	3,533				
France (a)	1	3,927			1	2,585				
Germany (a)	8	95,701			7	19,645				
Netherlands (a)					10	28,275				
Italy (a)	1	3,218								
Spain (a)										
United States (a)	4	8,287	23	53,903	4	6,036				
Argentina (a)	2	5,082								
Australia (a)	2	7,655								
Mexico (a)	1	2,711								
Dutch West Indies (a)	3	12,609								
Portugal (a)										
Russia (a)										
Total	335	1,989,632	24	54,133	26	64,124				
Richibucto, N.B.—										
Newfoundland (a)					1	707				
United States (a)					2	1,813				
United States (b)			1	629						
Total			1	629	3	2,520				
Rimouski, Que.—										
Great Britain (a)	50	58,908	1	1,229	1	1,357	1	1,018		
United States (a)	2	2,246	13	15,201						
Total	52	61,154	14	16,430	1	1,357	1	1,018		
Riverport, N.S.—										
British West Indies (b)	4	782								
St. Pierre (a)	2	98								
Sea Fisheries (b)	32	3,343								
Total	38	4,223								
St. Andrews, N.B.—										
United States (a)	989	37,902	510	8,117						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													12	37,859
													351	193,275
													1	3,244
								4	17,956				8	31,140
													1,887	34,634
								4	17,956				2,259	300,152
													1	1,459
						1	801						2	1,528
													1	600
						1	801						4	3,587
													1	2,391
								6	22,677				7	25,676
										Italy	1	3,241	22	30,435
								6	22,677		1	3,241	30	58,502
2	2,574					1	2,172			Jugo Slavia	1	3,783	226	1,563,009
													19	36,668
													37	47,781
										Italy	1	5,976	41	225,302
													2	6,512
										Russia	1	4,160	16	119,506
						4	11,240			Italy	3	15,921	17	55,436
										Italy	3	10,764	4	13,982
										Italy	1	3,640	1	3,640
3	9,130			1	2,960	1	2,987	1	4,293	Italy	3	9,448	40	97,044
										Italy / Portugal	1 / 1	3,310 / 2,986	4	11,378
													2	7,655
													1	2,711
1	3,587												4	16,196
										Italy	1	3,384	1	3,384
										Russia	2	8,320	2	8,320
6	15,291			1	2,960	6	16,399	1	4,293		18	71,692	417	2,218,524
													1	707
													2	1,813
													1	629
													4	3,149
													53	62,512
													15	17,447
													68	79,959
													4	782
													2	98
													32	3,343
													38	4,223
													1,499	46,019

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
St. George, N.B.—										
United States (a)	11	134	32	651						
United States (b)			1	258						
Total	11	134	33	909						
St. John, N.B.—										
Great Britain (a)	102	529,222			6	6,860	1	880		
British West Indies (a)	30	79,055			15	14,453	9	10,161		
British West Indies (b)	2	811								
Newfoundland (a)	6	7,111			6	3,585				
Newfoundland (b)	1	435								
Belgium (a)	11	45,802								
Cuba (a)							1	1,347		
France (a)	4	19,261			2	5,569				
Germany (a)	11	39,074			11	30,669				
Netherlands (a)	1	3,037			4	11,986				
Italy (a)	1	1,299								
Norway (a)					4	9,366				
San Domingo (a)			2	2,572	2	1,678	1	911		
St. Pierre (a)					1	616			1	547
United States (a)	208	59,636	286	209,126	34	39,705	3	2,704		
United States (b)	74	35,345	66	21,970						
Argentina (a)	2	2,773			2	5,142				
Honduras (a)					2	1,619				
British South Africa (a)			1	4,096						
Total	453	822,861	355	237,764	89	131,248	15	16,003	1	547
St. Peters, N.S.—										
Newfoundland (a)					1	1,136				
St. Pierre (a)					1	1,029				
United States (a)					3	2,411				
Total					5	4,576				
St. Stephen, N.B.—										
United States (a)	8	152	3	77						
United States (b)	1	483	7	3,643						
Total	9	635	10	3,720						
Salmon River, N.S.—										
St. Pierre (b)	1	73								
United States (b)	3	459								
Total	4	532								
Sandy Point, N.S.—										
British West Indies (b)	2	547								
Newfoundland (b)	1	100	1	81						
United States (b)	4	1,334	32	2,061						
Sea Fisheries (b)	1	32	58	3,669						
Total	8	2,013	91	5,811						
Sheet Harbour, N.S.—										
United States (a)					7	6,214				
Shelburne, N.S.—										
British West Indies (b)	1	274								
Newfoundland (a)	1	121								
Newfoundland (b)	1	61								
St. Pierre (a)										
United States (b)	3	218	28	1,801						
Sea Fisheries (b)	1	92	41	2,635						
Total	7	766	69	4,436						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													43	785
													1	258
													44	1,043
1	724			1	813								111	538,499
1	1,641			1	1,225								56	106,535
													2	811
													12	10,696
													1	435
													11	45,802
1	1,172												2	2,519
													6	24,830
										Italy	2	7,108	24	76,851
						2	7,023			Italy	3	10,615	10	32,661
										Italy	5	17,577	6	18,876
													4	9,366
3	3,768					1	1,226						9	10,155
													2	1,163
16	24,396	2	5,092	2	2,182					Italy Greece	10 1	31,849 1,941	562	376,631
													140	57,315
													4	7,915
1	1,116												3	2,735
										Italy Greece	1 1	4,200 3,437	3	11,733
23	32,817	2	5,092	4	4,220	3	8,249				23	76,727	968	1,335,528
													1	1,136
													1	1,029
													3	2,411
													5	4,576
													11	229
													8	4,126
													19	4,355
													1	73
													3	459
													4	532
													2	547
													2	181
													36	3,395
													59	3,701
													99	7,824
				1	814					Peru	1	1,295	9	8,323
													1	274
													1	121
													1	61
		1	535										1	535
													31	2,019
													42	2,727
		1	535										77	5,737

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Sherbrooke, N.S.—										
Newfoundland (a)					1	1,481				
St. Pierre (a)					1	909	2	1,798		
United States (a)					7	6,882	2	2,051		
United States (b)	3	1,186								
Total	3	1,186			9	9,272	4	3,849		
Shippegan, N.B.—										
Spain (b)										
Portugal (b)										
Sea Fisheries (b)	23	332								
Total	23	332								
Sidney, B.C.—										
Chile (a)			2	6,908						
United States (a)	55	13,472	451	133,879						
United States (b)	6	791	8	3,383						
Total	61	14,263	461	144,170						
Sorel, Que.—										
Newfoundland (a)										
Germany (a)	1	3,015								
Sweden (a)					1	2,395				
Chile (a)					4	14,141				
Total	1	3,015			5	16,536				
Souris, P.E.I.—										
Newfoundland (b)	2	143								
St. Pierre (b)	6	474								
Spain (b)										
United States (a)			1	1,431	1	1,123				
Sea Fisheries (b)	1	47								
Total	9	664	1	1,431	1	1,123				
Steveston, B.C.—										
United States (a)	39	2,402	45	1,197						
United States (b)	2	469								
Total	41	2,871	45	1,197						
Stewart, B.C.—										
United States (a)	65	49,044	4	5,358						
Summerside, P.E.I.—										
St. Pierre (a)							1	911		
United States (a)					4	3,318				
United States (b)	2	952								
Total	2	952			4	3,318	1	911		
Sydney, N.S.—										
Great Britain (a)	27	77,609			4	10,187				
British West Indies (a)	5	12,487								
British West Indies (b)	2	554								
Newfoundland (a)	57	78,075			68	225,884	2	1,822		
Newfoundland (b)	15	1,197	1	62						
France (a)					1	2,223				
Germany (a)										
Netherlands (a)	3	9,167								
Norway (a)					3	10,561				
Azores and Madeira (a)										
St. Pierre (a)			1	406	1	652				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	1,481
													3	2,707
													9	8,933
													3	1,186
													16	14,307
1	317												1	317
1	314												1	314
													23	332
2	631												25	963
													2	6,908
													506	147,351
													14	4,174
													522	158,433
						1	2,987						1	2,987
													1	3,015
													1	2,395
													4	14,141
						1	2,987						7	22,538
													2	143
		1	30										7	504
1	262												1	262
													2	2,554
													1	47
1	262	1	30										13	3,510
													84	3,599
													2	469
													86	4,068
													69	54,402
													1	911
3	3,220												7	6,538
													2	952
3	3,220												10	8,401
1	1,709												32	89,505
													5	12,487
													2	554
						1	2,180						128	307,961
													16	1,259
													1	2,223
										Italy	1	3,910	1	3,910
													3	9,167
													3	10,561
				1	810								1	810
		6	1,336										8	2,394

No. 12.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Continued*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Sydney, N.S.—*Concluded*										
Spain (a)					1	956				
United States (a)	7	18,215			6	6,535				
United States (b)			5	216						
Argentina (a)	4	10,386								
British South Africa (a)	5	14,050								
British East Africa (a)	1	1,830								
Brazil (a)	2	4,771								
Portugal (a)	2	5,077								
Gibraltar (a)	1	3,709								
Sea Fisheries (a)	1	148	21	529						
Sea Fisheries (b)	2	214								
Total	134	237,489	28	1,213	84	256,998	2	1,822		
Three Rivers, Que.—										
Great Britain (a)	32	108,443			8	13,189				
Germany (a)										
United States (a)	2	5,295			2	5,043				
Denmark (a)										
Total	34	113,738			10	18,232				
Union Bay, B.C.—										
British West Indies (a)	1	3,221								
Japan (a)	1	2,731								
United States (a)	9	16,590	24	2,589	1	2,957				
United States (b)	2	440								
Total	13	22,982	24	2,589	1	2,957				
Vancouver, B.C.—										
Great Britain (a)	121	414,496			3	11,086				
Denmark (a)										
Brazil (a)			1	3,516	1	2,485				
Belgium (a)	8	24,544			10	41,023				
China (a)	3	11,683	13	54,416	1	3,264				
Cuba (a)	3	9,257	1	3,500						
France (a)	3	10,075								
Germany (a)			4	12,155	3	10,371				
Netherlands (a)	18	96,244					1	3,655		
Italy (a)	7	22,168								
Norway (a)					1	4,493				
Trinidad (a)										
Japan (a)	55	267,683	1	5,442	11	37,604	3	8,428		
Australia (a)	27	173,154	1	3,729			5	13,572		
Hong Kong (a)	20	162,408								
New Zealand (a)	6	20,277								
Uruguay (a)					1	2,326				
Sweden (a)							7	19,478		
Mexico (a)	1	520								
United States (a)	1,009	1,623,662	454	820,690	34	93,824	8	25,444		
French Oceania (a)	1	1,199								
Fiji Islands (a)	4	14,555								
British West Indies (a)	2	7,534			2	5,882				
Colombia (a)	2	10,288								
Canary Islands (a)	1	2,951								
Panama (a)	2	3,320			1	2,615				
Egypt (a)	4	14,154								
Hawaii (a)	1	2,689					1	3,412		
French Africa (a)	3	10,976					1	2,530		
Portuguese Africa (a)	2	6,089								
Argentina (a)	5	12,522	10	35,791	3	8,015				
Peru (a)	2	9,087			2	4,872				
Sea Fisheries (a)	145	2,276	4	188						
Chile (a)			1	3,465						
Total	1,455	2,933,811	490	942,892	73	227,860	26	76,519		

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	956
2	4,865									Italy	2	7,689	17	37,304
													5	216
										Italy	1	3,310	5	13,696
										Italy	3	10,151	8	24,201
													1	1,830
													2	4,771
													2	5,077
													1	3,709
		11	2,419							Spain	1	500	34	3,596
													2	214
3	6,574	17	3,755	1	810	1	2,180				8	25,560	278	536,401
1	1,876			1	2,960	4	11,282						46	137,750
				1	3,054								1	3,054
1	2,924									Italy	7	26,660	12	39,922
1	2,786												1	2,786
3	7,586			2	6,014	4	11,282				7	26,660	60	183,512
													1	3,221
													1	2,731
													34	22,136
													2	440
													38	28,528
		1	4,391										125	429,973
6	27,396												6	27,396
													2	6,001
				4	14,794	10	49,185						32	129,546
								6	30,465	China	1	3,915	24	103,743
1	2,693												5	15,450
		20	73,390							Italy	1	3,715	24	87,180
4	16,607			17	55,466					Italy	2	6,769	30	101,368
						13	69,893						32	169,792
										Italy	17	73,162	24	95,330
													1	4,493
										Italy	1	3,899	1	3,899
9	29,902	1	4,163	1	2,958			106	467,204	China	17	65,898	204	889,282
3	11,015							1	3,405				37	204,875
													20	162,408
													6	20,277
													1	2,326
													7	19,478
													1	520
1	2,675	1	4,164					57	235,957	China Italy Panama	3 3 2	9,839 10,442 1,779	1,572	2,828,476
										China Guatemala	1 1	496 865	3	2,560
													4	14,555
1	3,425									Italy	1	3,241	6	20,082
													2	10,288
													1	2,951
													3	5,935
													4	14,154
													2	6,101
													4	13,506
													2	6,089
													18	56,328
													4	13,959
													149	2,464
													1	3,465
25	93,713	23	86,108	22	73,218	23	119,078	170	737,031		50	184,020	2,357	5,474,250

No. 12.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Inwards *from Sea*, etc.—*Concluded*

Ports and Outports and Countries whence Arrived — Ports et ports secondaires et pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Victoria, B.C.—										
Great Britain (a)	35	139,557								
Australia (a)	10	81,917			1	2,296				
New Zealand (a)	5	40,182								
Belgium (a)	1	3,400			1	5,341				
China (a)	16	140,395	3	20,224						
Mexico (a)	1	334								
Netherlands (a)	5	28,714								
Japan (a)	25	171,692	24	201,399	1	2,939				
From Sea (a)	26	508	105	815						
Costa Rica (a)	1	2,127								
United States (a)	767	782,973	866	1,164,881	4	11,811				
United States (b)	94	19,297	76	24,781						
Total	986	1,411,096	1,074	1,412,100	7	22,387				
Wallace, N.S.—										
United States (b)			1	1,109						
Westport, N.S.—										
United States (a)	16	952	16	205						
Weymouth, N.S.—										
British West Indies (b)	1	238								
St. Pierre (b)	2	106								
United States (a)	2	1,110			2	1,124				
United States (b)	9	2,138	5	861						
Total	14	3,592	5	861	2	1,124				
White Rock, B.C.—										
United States (a)	19	662	3	42						
United States (b)	3	710								
Total	22	1,327	3	42						
Windsor, N.S.—										
Great Britain (a)	2	3,939			1	933				
Newfoundland (a)	1	1,970								
Germany (a)										
United States (a)	78	146,070			65	57,822	1	911		
United States (b)	13	3,328	14	12,787						
Total	94	155,307	14	12,787	66	58,755	1	911		
Winnipeg, Man.—										
Great Britain (a)	2	1,843								
Wolfville, N.S.—										
United States (b)	6	1,127								
Yarmouth, N.S.—										
Great Britain (b)	2	675								
St. Pierre (b)	28	2,390								
United States (a)	118	109,096	45	121,169	1	689				
United States (b)	15	5,025	45	2,116						
Sea Fisheries (b)	21	1,246	51	2,728						
Total	184	118,432	141	126,013	1	689				
York Factory, Man.—										
Great Britain (a)	1	1,487								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 12.—RELEVÉ du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à l'entrée*, etc.—*Fin*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
						1	5,808						36	145,365
2	4,926												13	89,139
													5	40,182
													2	8,741
								3	15,486				22	176,105
													1	334
						11	54,187						16	82,901
1	2,694							52	240,483				103	619,207
													131	1,323
													1	2,127
		1	2,899					39	190,871	Undocumented	2	2,568	1,679	2,155,993
													170	44,078
3	7,620	1	2,889			12	59,995	94	446,840		2	2,568	2,179	3,365,495
													1	1,109
													32	1,157
													1	238
													2	106
1	637												5	2,871
													14	2,999
1	637												22	6,214
													22	704
													3	710
													25	1,414
													3	4,872
1	637												2	2,607
				1	1,091								1	1,091
3	2,977			1	1,091								148	208,871
													27	16,115
4	3,614			2	2,182								181	233,556
													2	1,843
													6	1,127
													2	675
													28	2,390
													164	230,954
													60	7,141
													72	3,974
													326	245,134
													1	4,187

No. 13.—Summary Statement of the Nationality of Sea-going Vessels entered Inwards *from Sea* from each Country

No.	Countries from which arrived — Pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
		Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	Great Britain	1,219	5,693,361	4	7,941	83	134,658	9	13,149		
2	Australia	79	419,925	1	3,729	1	2,296	5	13,572		
3	British East Africa	1	1,830								
4	British South Africa	6	17,522	1	4,096						
5	British West Africa	11	40,897								
6	British Honduras							1	1,273		
7	British India	20	74,844								
8	British West Indies	195	330,263			36	37,544	43	46,309		
9	Fiji Islands	6	21,816								
10	Gibraltar	3	7,543								
11	Hong Kong	20	162,408								
12	Irish Free State	3	9,359								
13	Jamaica	2	7,534			2	5,882				
14	Newfoundland	910	650,990	9	2,464	138	287,921	2	1,822		
15	New Zealand	21	94,622								
16	Trinidad										
17	Argentina	31	80,712	11	39,307	8	21,296				
18	Azores and Madeira										
19	Belgium	114	581,248			13	51,916			1	3,071
20	Brazil	2	4,771	1	3,516	2	4,970				
21	Canary Islands	1	2,951								
22	Chile			2	6,908	8	26,840				
23	China	22	161,418	16	74,640	2	6,528				
24	Colombia	27	143,830	26	121,312						
25	Costa Rica	1	2,127								
26	Cuba	6	14,538	1	3,500	3	4,181	3	3,452		
27	Denmark					3	2,122				
28	Dutch Guiana					2	2,343				
29	Dutch West Indies	8	30,516								
30	Ecuador	5	17,036								
31	Egypt	5	16,983								
32	France	14	59,510			13	34,458				
33	French Africa	10	31,704					1	2,530		
34	French Oceania	1	1,199								
35	Germany	37	192,561	7	22,672	39	110,608				
36	Greece										
37	Hawaii	2	5,378					1	3,412		
38	Hayti	1	1,194								
39	Honduras					2	1,619				
40	Italy	31	90,667			2	5,494				
41	Japan	97	496,746	26	210,291	18	57,233	3	8,428		
42	Mexico	5	9,188	2	9,369						
43	Miquelon and St. Pierre	148	19,759	2	1,164	7	5,507	3	2,709	1	547
44	Netherlands	34	159,706			31	86,537	1	3,655		
45	Norway					42	194,892				
46	Panama	3	6,146			2	5,572				
47	Peru	24	141,270			2	4,872				
48	Porto Rico	1	143								
49	Portugal	4	7,677								
50	Portugese Africa	2	6,089								
51	Russia										
52	San Domingo	1	1,584	2	2,572	5	5,678	2	1,816		
53	Spain	5	6,163			3	2,346	3	3,869		

N° 13.—État sommaire des nationalités des long-courriers de chaque pays, déclarés *à l'entrée*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Pays			Total — Total		
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Names — Noms	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	No.
										Italy	6	18,331			
										Spain	4	10,533			
21	35,031	11	29,155	4	6,884	30	74,047			Greece	5	12,063	1,397	6,038,936	1
										JugoSlavia	1	3,783			
5	15,941							1	3,405				92	458,868	2
													1	1,830	3
										Greece	1	3,437	13	42,996	4
										Italy	5	17,941			
													11	40,897	5
													1	1,273	6
													20	74,844	7
9	15,324			2	3,084								285	432,524	8
													6	21,816	9
										Spain	1	3,478			
										Greece	1	3,437	6	17,986	10
										Italy	1	3,528			
													20	162,408	11
													3	9,359	12
1	3,425									Italy	2	6,482	7	23,323	13
2	750	1	2,819	1	1,128	4	8,757			Spain	1	127	1,069	956,848	14
										Portugal	1	70			
													21	94,622	15
										Italy	1	3,899	1	3,899	16
										Italy	3	9,930			
1	2,307	2	5,081							Portugal	2	5,972	59	167,494	17
										Finland	1	2,889			
				1	810								1	810	18
		1	2,546	5	17,754	14	58,269			Greece	1	3,677	154	740,880	19
										Italy	5	22,399			
													5	13,257	20
													1	2,951	21
													10	33,748	22
								10	48,589	China	1	3,915	51	295,090	23
													53	265,142	24
													1	2,127	25
2	3,865			1	1,129					Italy	1	3,109	17	33,774	26
53	271,674												56	273,796	27
													2	2,343	28
1	3,587												9	34,103	29
													5	17,036	30
										Italy	2	6,336	8	26,099	31
										Greece	1	2,780			
		59	170,173							Italy	6	20,295	93	286,749	32
										Greece	1	2,313			
										Italy	7	25,933	18	00,167	33
		1	496							Guatemala	1	865	3	2,560	34
										Italy	11	39,423			
										Jugo Slavia	1	3,469			
4	16,607			42	211,923	3	6,480			Greece	1	3,176	146	611,079	35
										Russia	1	4,160			
										Greece	2	4,697	3	8,125	36
										Italy	1	3,428			
													3	8,799	37
													1	1,194	38
1	1,116												3	2,735	39
										Italy	42	162,479			
										Spain	3	10,129			
										Greece	2	6,383	81	278,935	40
										Jugo Slavia	1	3,783			
13	42,563	1	4,163	1	2,958			204	881,588	China	18	69,813	381	1,773,783	41
1	1,547									Mexico	2	6,474	10	26,578	42
		135	29,118	1	291					Spain	2	667	299	59,762	43
										Italy	17	64,611			
		1	3,239			85	415,408			Greece	3	9,812	176	757,035	44
										Jugo Slavia	4	14,067			
													42	194,892	45
													5	11,718	46
										Peru	1	1,169	27	147,311	47
													1	143	48
										Italy	3	9,912			
1	314									Greece	1	2,103	10	20,153	49
										Portugal	1	147			
													2	6,089	50
										Russia	2	8,320	2	8,320	51
3	3,768					2	2,027						15	17,445	52
3	840									Spain	3	7,143	22	40,253	53
										Italy	5	19,892			

No. 13.—SUMMARY STATEMENT of the Nationality of Sea-going Vessels entered Inwards *from Sea*, from each Country—*Concluded*

No.	Countries from which arrived — Pays de départ	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
		Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
54	Sweden	.....	.....	.....	.....	3	5,850	27	166,350	.....	.....
55	United States	5,895	4,246,870	5,424	3,468,508	364	479,442	39	113,232	.....	.....
56	Uruguay	.....	.....	.....	.....	2	4,653	.....	.....	.....	.....
57	Venezuela	4	13,975	.....	.....	.....	.....	.....	.....	.....	.....
58	From Sea	62	31,625	106	823	.....	.....	.....	.....	.....	.....
59	Sea Fisheries	2,440	112,672	1,371	44,152	.....	.....	.....	.....	.....	.....
	Total	11,539	14,230,870	7,012	4,026,964	836	1,593,258	143	385,578	2	3,618

N° 13.—ÉTAT SOMMAIRE des nationalités des long-courriers de chaque pays, déclarés *à l'entrée—Fin*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres Pays			Total — Total		
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Names — Noms	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	No.
1	1,475	....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	31	173,675	54
										Italy.....	58	200,100			
										Greece.....	1	1,941			
										Peru.....	1	1,295			
59	133,152	5	14,706	9	15,736	3	7,025	111	487,601	China.....	3	9,839	11,976	9,183,794	55
										Panama...	2	1,779			
										Undocumented...	2	2,568			
....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	2	4,653	56
....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	4	13,975	57
....	.....	8	8,928	....	.....	.....	.....	.....	.....	.....	.....	.....	176	41,376	58
....	.....	169	48,578	....	.....	.....	.....	.....	.....	Spain.....	6	3,077	3,986	208,479	59
181	553,286	394	319,002	67	261,697	141	572,013	326	1,421,183	.....	262	873,378	20,903	24,240,847	

TRADE WITH EACH COUNTRY AND NATIONALITY OF VESSELS

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards *for Sea* at each of the undermentioned Ports and Outports in Canada, for foreign countries distinguishing the Nationality of the Vessels employed in the trade with each country.

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgium	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Albert, N.B.—										
Great Britain (a)	1	1,500								
United States (b)	4	886	6	1,689						
Total	5	2,386	6	1,689						
Alert Bay, B.C.—										
United States (a)			36	31,904	2	4,966				
Sea Fisheries (a)			19	430						
Total			55	32,334	2	4,966				
Amherst, N.S.—										
Newfoundland (b)	2	196								
Amherst Harbour, Que.—										
Newfoundland (a)	1	396								
Annapolis Royal, N.S.—										
British West Indies (b)	1	337								
United States (a)					17	8,466				
United States (b)	4	546								
Total	5	883			17	8,466				
Anyox, B.C.—										
United States (a)	83	107,732	5	9,343						
Arichat, N.S.—										
Sea Fisheries (b)	24	386	10	162						
Baddeck, N.S.—										
Newfoundland (a)	14	2,916								
United States (a)					34	53,640				
Sea Fisheries (b)	11	216								
Total	25	3,132			34	53,640				
Bamfield, B.C.—										
For Sea (a)	4	73	1	8						
United States (a)	3	106								
Total	7	179	1	8						
Barrington Passage, N.S.—										
United States (b)			3	33						
Sea Fisheries (a)	3	33	3	231						
Total	3	33	6	264						
Bathurst, N.B.—										
Great Britain (a)	3	1,378								
Norway (a)					1	737				
United States (b)			2	1,928						
Sea Fisheries (b)	60	875								
Total	63	2,253	2	1,928	1	737				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

COMMERCE AVEC CHACUN DES PAYS ET NATIONALITÉ DES NAVIRES

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés à la sortie à chacun des ports et ports secondaires du Canada mentionnés ci-après, à destination étrangère, et de la nationalité des long-courriers employés dans le commerce avec chaque pays.

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			— Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,500
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	2,575
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	4,075
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	36,870
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	430
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57	37,300
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	196
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	396
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	337
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	8,466
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	546
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	9,349
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88	117,075
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	548
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	2,916
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	53,640
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	216
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59	56,772
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	81
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	106
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	187
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	33
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	264
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	297
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1,378
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	737
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1,928
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	875
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66	4,918

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Bear River, N.S.—										
United States (a)	7	10,556								
United States (b)	3	240								
Total	10	10,796								
Belliveau's Cove, N.S.—										
British West Indies (b)	2	564								
Cuba (b)	1	238								
United States (b)	12	1,732	1	19						
Sea Fisheries (b)	2	31								
Total	17	2,565	1	19						
Bonne Esperance, Que.—										
Newfoundland (a)	20	7,990			1	870				
Newfoundland (b)	7	377								
Total	27	8,367			1	870				
Bridgewater, N.S.—										
British West Indies (b)	1	528								
Newfoundland (b)	1	92								
United States (a)					24	23,852				
United States (b)	19	8,649	2	1,361						
Total	21	9,269	2	1,361	24	23,852				
Britannia Beach, B.C.—										
Japan (a)	1	2,689								
United States (a)			22	44,438	1	2,391				
Total	1	2,689	22	44,438	1	2,391				
Buctouche, N.B.—										
United States (a)					2	1,396				
Butedale, B.C.—										
United States (a)	2	1,561	27	456						
Sea Fisheries (a)	53	1,747	38	1,078						
Total	55	3,308	65	1,534						
Campbellton, N.B.—										
Great Britain (a)	5	8,958			13	14,612	1	1,273		
Newfoundland (b)	1	296								
United States (a)					1	948				
United States (b)	2	815								
Total	8	10,069			14	15,560	1	1,273		
Campobello, N.B.—										
United States (a)	367	36,946	182	7,091						
Canso, N.S.—										
Newfoundland (a)	1	30	1	92						
United States (a)	6	2,609	3	235						
United States (b)	1	435	4	3,910						
Sea Fisheries (a)	92	15,371	50	1,509						
Sea Fisheries (b)	50	5,050	2	33						
Total	150	23,495	60	5,779						
Caraquet, N.B.—										
Sea Fisheries (b)	113	2,000								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													7	10,556
													3	240
													10	10,796
													2	564
													1	238
													13	1,751
													2	31
													18	2,584
													21	8,860
													7	377
													28	9,237
													1	528
													1	92
1	1,314			1	1,128								26	26,294
													21	10,010
1	1,314			1	1,128								49	36,924
										China	1	3,915	2	6,604
										Italy	1	3,241	24	50,070
											2	7,156	26	56,674
													2	1,396
													29	2,017
													91	2,825
													120	4,842
						1	1,783						20	26,626
													1	296
													1	948
													2	815
						1	1,783						24	28,685
													549	44,037
													2	122
1	880												10	3,724
													5	4,345
													142	16,880
													52	5,083
1	880												211	30,154
													113	2,000

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Charlottetown, P.E.I.—										
Newfoundland (a)	26	25,090			10	5,972	1	911		
Newfoundland (b)	4	339								
Cuba (a)					1	934				
St. Pierre (b)	2	156								
United States (a)	3	3,900	1	3,970	6	8,597				
Sea Fisheries (b)	2	23								
Total	37	29,508	1	3,970	17	15,503	1	911		
Chatham, N.B.—										
Great Britain (a)	1	2,006			2	2,511				
United States (a)	1	1,188			10	10,526				
United States (b)	3	2,521								
Total	5	5,715			12	13,037				
Chemainus, B.C.—										
Great Britain (a)	2	6,469								
British West Indies (a)	3	8,156	1	3,541						
China (a)										
Germany (a)					1	2,494				
Japan (a)	2	6,879			2	8,244	1	2,862		
United States (a)	107	22,869	80	39,303	5	15,106				
United States (b)	23	22,037	21	32,697						
British South Africa (a)	1	3,149								
British Oceania (a)	3	10,365			1	2,864	3	8,186		
Total	141	79,924	102	75,541	9	28,708	4	11,048		
Chester, N.S.—										
Sea Fisheries (a)	25	348								
Cheticamp, N.S.—										
United States (a)					14	13,079				
Church Point, N.S.—										
United States (b)	3	386								
Clarks Harbour, N.S.—										
United States (b)			5	25						
Sea Fisheries (a)	6	84								
Total	6	84	5	25						
Clementsport, N.S.—										
United States (b)	6	363								
Dalhousie, N.B.—										
Great Britain (a)					1	778				
Digby, N.S.—										
United States (a)	18	588	6	66	8	3,984				
Freeport, N.S.—										
United States (a)	9	315	11	171						
Gaspé, Que.—										
Great Britain (a)					1	568				
British West Indies (a)							1	727		
British West Indies (b)	2	646								
Newfoundland (a)	1	2,028								
Newfoundland (b)	1	40								
St. Pierre (a)	1	270								
St. Pierre (b)	1	33								
United States (a)			5	5,380						
United States (b)	4	1,917								
Total	10	4,934	5	5,380	1	568	1	727		

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													37	31,973
													4	339
													1	934
		1	46										3	202
2	4,018												12	20,485
													2	23
2	4,018	1	46										59	53,956
													3	4,517
1	1,202												12	12,916
													3	2,521
1	1,202												18	19,954
													2	6,469
1	2,694												5	14,391
								1	4,988				1	4,988
													1	2,494
								10	42,902				15	60,887
										China	1	2,015	193	79,293
													44	54,734
1	2,394							1	3,320				3	8,863
													7	21,415
2	5,088							12	51,210		1	2,015	271	253,534
													25	348
													14	13,079
													3	386
													5	25
													6	84
													11	109
													6	363
													1	778
													32	4,638
													20	486
													1	568
													1	727
													2	646
													1	2,028
													1	40
													1	270
		1	24										2	57
2	2,340												7	7,720
													4	1,917
2	2,340	1	24										20	13,973

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Georgetown, P.E.I.—										
Newfoundland (a)	7	534								
Cuba (a)					2	2,149				
St. Pierre (b)	1	34								
United States (a)					1	1,456	1	1,336		
Sea Fisheries (b)	2	24								
Total	10	592			3	3,605	1	1,336		
Glace Bay, N.S.—										
Great Britain (a)	2	41								
Great Britain (b)	28	1,076								
Total	30	1,117								
Guysboro, N.S.—										
United States (a)	2	2,282			8	6,779	4	4,155		
Hantsport, N.S.—										
British West Indies (b)	1	316								
Halifax, N.S.—										
Great Britain (a)	144	698,335			8	6,026				
British West Indies (a)	3	913			4	3,209	26	27,365		
British West Indies (b)	7	3,895								
Newfoundland (a)	110	174,742	1	81	16	9,797				
Newfoundland (b)	43	4,170								
Colombia (a)	13	72,363								
Cuba (a)	16	32,318	1	2,223	2	1,637	1	855		
Brazil (a)	3	964								
France (a)					1	2,585				
Argentina (a)					1	2,834				
Germany (a)	5	16,168								
Netherlands (a)	1	2,763			1	2,936				
Italy (a)	1	1,783								
Porto Rico (a)	5	660								
Norway (a)					5	13,859				
Japan (a)			1	1,828						
Ecuador (a)	2	5,896								
For Sea (a)	28	29,730								
St. Pierre (a)	47	11,961			1	498				
St. Pierre (b)	5	435								
Uruguay (a)	2	5,866								
Sweden (a)							7	49,304		
Denmark (a)										
United States (a)	204	1,015,427	35	57,818	47	154,662	20	146,990		
United States (b)	27	10,698	8	4,076						
Mexico (a)			2	8,549						
British Guiana (a)	41	98,138			19	19,567	11	12,480		
Australia (a)	7	24,346								
New Zealand (a)	5	15,585								
Peru (a)	9	45,674								
Morocco (a)										
British Honduras (a)	8	17,568								
Sea Fisheries (a)	357	38,615	16	722						
Sea Fisheries (b)	24	2,526								
Total	1,117	2,331,539	64	75,297	105	217,610	65	236,994		
Hillsboro, N.B.										
United States (a)					14	9,898				
United States (b)			2	380						
Total			2	380	14	9,898				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													7	534
1	1,180												3	3,329
													1	34
													2	2,792
													2	24
1	1,180												15	6,713
													2	41
													28	1,076
													30	1,117
1	1,411												15	14,627
													1	316
1	637			3	1,918					Peru	1	1,295	157	708,211
													33	31,487
													7	3,895
1	113												128	184,733
										Portugal	1	147	44	4,317
													13	72,363
1	1,284			2	5,817								23	44,134
													3	964
													1	2,585
													1	2,834
													5	16,168
				1	1,958								3	7,657
													1	1,783
													5	660
1	5,986												6	19,845
													1	1,828
													2	5,896
		10	11,160										38	40,890
		24	4,821							Spain	1	23	73	17,303
													5	435
													2	5,866
													7	49,304
4	25,631												4	25,631
50	246,787	17	89,223	23	145,859	19	172,919			Peru	1	1,169	416	2,030,854
													35	14,774
													2	8,549
5	7,289									Russia	1	1,116	77	138,590
													7	24,346
													5	15,585
													9	45,674
										Russia	1	70	1	70
													8	17,568
		62	23,441							Spain	3	1,675	438	64,453
													24	2,526
63	287,727	113	128,645	29	155,552	19	172,919				9	5,495	1,584	3,611,778
													14	9,898
													2	380
													16	10,278

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Isaacs Harbour, N.S.—										
United States (a)			9	134						
United States (b)	1	119								
Sea Fisheries (a)	1	10	25	554						
Total	2	129	34	688						
Joggin Mines, N.S.—										
Great Britain (b)	22	873								
United States (b)			1	160						
Total	22	873	1	160						
Kentville, N.S.—										
United States (b)	1	80								
Ladner, B.C.—										
United States (a)			1	38						
United States (b)			1	380						
Total			2	418						
Ladysmith, B.C.—										
Great Britain (a)	1	552								
Japan (a)										
United States (a)	75	5,816	48	41,860						
United States (b)	99	23,451	21	3,005						
Total	175	29,819	69	44,865						
La Have, N.S.—										
British West Indies (b)	1	323								
Newfoundland (b)	3	501								
Sea Fisheries (a)	4	44								
Sea Fisheries (b)	31	3,218								
Total	39	4,086								
Liverpool, N.S.—										
British West Indies (a)	1	72								
Newfoundland (a)	4	417								
Germany (a)										
St. Pierre (a)	4	164								
United States (a)	6	500	3	171	2	1,441				
United States (a)	4	1,895	2	1,248						
Sea Fisheries (a)	42	1,015	35	1,939						
Total	61	4,063	40	3,358	2	1,441				
Lockeport, N.S.—										
United States (a)			1	30						
United States (b)			7	106						
Sea Fisheries (b)	14	603	1	121						
Total	14	603	9	257						
Lord's Cove, N.B.										
United States (a)	581	13,654	267	3,116						
Louisburg, N.S.—										
Great Britain (a)					2	2,220				
Newfoundland (a)	8	9,778			1	934				
Newfoundland (b)	5	425	4	352						
Belgium (a)					1	3,532				
Germany (a)					1	1,892				
Japan (a)	1	4,104								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													9	134
													1	119
													26	564
													36	817
													22	873
													1	160
													23	1,033
													1	80
													1	38
													1	380
													2	418
													1	552
								1	4,585				1	4,585
								1	3,565	China	1	2,015	125	53,256
													120	26,456
								2	8,150		1	2,015	247	84,849
													1	323
													3	501
													4	44
													31	3,218
													39	4,086
													1	72
													4	417
				1	1,091								1	1,091
													4	164
1	1,201												12	3,313
													6	3,143
													77	2,954
1	1,201			1	1,091								105	11,154
													1	30
													7	106
													15	724
													23	860
													848	16,770
						1	1,783						3	4,003
													9	10,712
													9	777
													1	3,532
													1	1,892
													1	4,104

No. 14.—STATEMENT of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Louisburg, N.S.—*Concluded*										
Denmark (a)					1	2,032				
St. Pierre (a)	1	421					1	899		
St. Pierre (b)	1	79								
United States (a)	3	5,473								
New Zealand (a)	2	6,155								
Australia (a)	4	13,099								
Sea Fisheries (a)	1	148								
Sea Fisheries (b)	13	394	84	2,144						
Total	39	40,076	88	2,496	6	10,610	1	899		
Lower East Pubnico, N.S.—										
Sea Fisheries (a)			27	1,607						
Lunenburg, N.S.—										
British West Indies (a)	1	114								
British West Indies (b)	2	261								
Newfoundland (a)	8	563								
Newfoundland (b)	7	747								
St. Pierre (a)	6	832			1	598				
St. Pierre (b)	10	847								
United States (a)			1	30						
United States (b)	2	778	2	606						
Porto Rico (a)	2	432								
Porto Rico (b)	13	1,590								
Portugal (b)	1	134								
Sea Fisheries (a)	63	2,501	7	446						
Sea Fisheries (b)	175	17,383								
Total	290	26,182	10	1,082	1	598				
Mabou, N.S.—										
United States (a)							1	905		
Mahone Bay, N.S.—										
Newfoundland (b)	1	119								
Porto Rico (b)	1	119								
Sea Fisheries (b)	3	282								
Total	5	520								
Maitland, N.S.—										
United States (b)	9	3,395								
Margaretsville, N.S.—										
United States (a)	1	353								
United States (b)	2	451								
Total	3	804								
Moncton, N.B.—										
Great Britain (a)	1	1,457			1	1,284				
United States (b)	2	818	2	565						
Total	3	2,275	2	565	1	1,284				
Montague, P.E.I.—										
Newfoundland (b)	9	601								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés, *à la sortie* etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	2,032
		1	216										3	1,536
													1	79
													3	5,473
													2	6,155
													4	13,099
		2	606										3	754
													97	2,538
		3	822			1	1,783						138	56,686
													27	1,607
													1	114
													2	261
													8	563
													7	747
													7	1,430
													10	847
													1	30
													4	1,384
													2	432
													13	1,590
													1	134
													70	2,947
													175	17,383
													301	27,862
													1	905
													1	119
													1	119
													3	282
													5	520
													9	3,395
													1	353
													2	451
													3	804
													2	2,741
													4	1,383
													6	4,124
													9	601

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Montreal, Que.—										
Great Britain (a)	327	1,818,037	.....	.....	2	2,093	1	1,255	1	3,071
British West Indies (a)	26	53,397	.....	.....	9	10,564	.....	.....	.....	.....
Newfoundland (a)	66	78,753	.....	.....	10	9,413	1	2,084	.....	.....
Belgium (a)	33	98,432	.....	.....	1	3,533	.....	.....	.....	.....
Portugal (a)	4	10,233	.....	.....	.....	.....	.....	.....	.....	.....
Denmark (a)	2	3,766	.....	.....	3	5,131	1	1,282	.....	.....
France (a)	6	21,888	.....	.....	9	24,858	.....	.....	.....	.....
Germany (a)	88	254,032	3	5,402	32	85,985	.....	.....	.....	.....
Netherlands (a)	53	150,357	.....	.....	19	53,322	.....	.....	.....	.....
Italy (a)	11	27,393	.....	.....	.....	.....	.....	.....	.....	.....
Norway (a)	.....	.....	.....	.....	21	49,572	.....	.....	.....	.....
Greece (a)	5	14,660	.....	.....	1	2,561	.....	.....	.....	.....
Brazil (a)	1	2,418	.....	.....	1	2,648	.....	.....	.....	.....
Mexico (a)	2	6,276	16	72,885	.....	.....	.....	.....	.....	.....
Venezuela (a)	4	13,727	.....	.....	.....	.....	.....	.....	.....	.....
Spain (a)	1	3,210	.....	.....	.....	.....	.....	.....	.....	.....
Sweden (a)	2	3,701	.....	.....	4	7,196	1	1,624	.....	.....
United States (a)	28	76,165	32	74,985	5	11,021	1	1,273	.....	.....
New Zealand (a)	10	32,351	.....	.....	.....	.....	.....	.....	.....	.....
Australia (a)	10	35,861	.....	.....	.....	.....	.....	.....	.....	.....
Colombia (a)	15	80,223	1	4,352	.....	.....	.....	.....	.....	.....
Peru (a)	5	34,225	1	5,978	.....	.....	.....	.....	.....	.....
Lettonia (a)	1	1,819	.....	.....	.....	.....	.....	.....	.....	.....
Poland (a)	1	3,042	.....	.....	.....	.....	.....	.....	.....	.....
French Africa (a)	1	2,451	.....	.....	.....	.....	.....	.....	.....	.....
British South Africa (a)	7	29,953	.....	.....	.....	.....	.....	.....	.....	.....
Irish Free State (a)	12	36,814	.....	.....	.....	.....	.....	.....	.....	.....
Total	721	2,893,184	53	163,602	117	267,897	5	7,518	1	3,071
Moose Factory, Ont.—										
Great Britain (a)	1	1,487	.....	.....	.....	.....	.....	.....	.....	.....
Murray Harbour, P.E.I.—										
Sea Fisheries (b)	6	160	.....	.....	.....	.....	.....	.....	.....	.....
Nanaimo, B.C.—										
Great Britain (a)	2	5,839	.....	.....	1	1,698	.....	.....	.....	.....
British West Indies (a)	2	5,188	1	865	.....	.....	.....	.....	.....	.....
China (a)	.....	.....	1	1,223	.....	.....	.....	.....	.....	.....
Netherlands (a)	1	3,299	.....	.....	.....	.....	.....	.....	.....	.....
Japan (a)	3	9,082	1	1,420	.....	.....	.....	.....	.....	.....
United States (a)	96	75,497	131	97,989	4	11,044	.....	.....	.....	.....
United States (b)	17	13,246	70	22,129	.....	.....	.....	.....	.....	.....
Sea Fisheries (a)	42	785	521	11,155	.....	.....	.....	.....	.....	.....
Total	163	112,936	725	134,781	5	12,742	.....	.....	.....	.....
Newcastle, N.B.—										
Great Britain (a)	.....	.....	.....	.....	2	3,010	.....	.....	.....	.....
United States (a)	.....	.....	.....	.....	3	2,444	.....	.....	.....	.....
United States (b)	1	499	1	627	.....	.....	.....	.....	.....	.....
Total	1	499	1	627	5	5,454	.....	.....	.....	.....

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	1	2,051	.....	.....	2	4,069	.....	.....	.....	.....	.....	334	1,830,576
6	8,405	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	72,366
.....	.....	.....	.....	.....	.....	1	2,964	.....	.....	.....	.....	.....	78	93,214
.....	.....	4	11,864	1	2,960	10	27,898	.....	.....	Italy.....	4	14,546	55	165,231
										Greece.....	2	5,998		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Portugal....	1	2,986	5	13,219
16	25,305	.....	.....	1	2,298	2	4,659	.....	.....	.....	.....	.....		
										Greece.....	2	6,613	25	42,441
										Italy.....	7	24,941		
.....	.....	2	5,681	.....	.....	.....	.....	1	4,800	Spain.....	2	7,060	29	95,841
										Italy.....	27	99,264		
										Greece.....	2	6,145		
3	6,486	2	4,870	1	3,669	18	43,480	1	4,280	Jugo Slavia	2	7,094	185	540,454
										Finland....	1	2,889		
										Spain.....	5	16,858		
										Greece.....	1	2,439		
.....	.....	4	11,045	.....	.....	33	87,444	.....	.....	Italy.....	13	48,003	124	356,079
										Jugo Slavia	1	3,469		
										Greece.....	2	6,874		
										Italy.....	54	181,958		
.....	.....	2	5,785	1	2,960	2	4,113	2	9,059	Jugo Slavia	3	10,756	79	255,765
										Spain.....	2	6,867		
1	1,690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	51,262
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Greece.....	8	20,060	17	47,492
										Italy.....	3	10,211		
2	4,614	.....	.....	.....	.....	1	1,876	.....	.....	.....	.....	.....	5	11,556
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mexico.....	1	3,237	19	82,398
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mexico.....	1	3,237	5	16,964
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,210
5	7,318	.....	.....	.....	.....	.....	.....	.....	.....	Greece.....	1	2,313	13	22,152
1	4,159	.....	.....	.....	.....	1	2,287	.....	.....	Italy.....	1	3,233	69	173,123
.....	.....	.....	.....	.....	.....	1	2,789	.....	.....	.....	.....	.....	11	35,140
.....	.....	.....	.....	.....	.....	2	4,926	.....	.....	.....	.....	.....	12	40,787
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	84,575
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	40,203
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,819
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,042
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,451
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	29,953
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	36,814
34	57,977	15	41,296	4	11,887	73	186,505	4	18,139	.....	146	497,051	1,173	4,148,127
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1,487
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	160
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	7,537
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	6,053
.....	.....	.....	.....	.....	.....	.....	.....	1	4,254	.....	.....	.....	2	5,477
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,299
.....	.....	.....	.....	.....	.....	.....	.....	18	67,999	.....	.....	.....	22	78,501
.....	.....	.....	.....	.....	.....	.....	.....	1	3,383	China.....	1	2,823	233	190,736
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87	35,375
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	563	11,940
.....	.....	.....	.....	.....	.....	.....	.....	20	75,636	.....	1	2,823	914	338,918
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	3,010
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	2,444
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1,126
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	6,580

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
New Westminster, B.C.—										
Great Britain (a)	25	85,194	8	34,001	6	16,637	4	10,653		
British West Indies (a)										
China (a)										
Japan (a)	5	17,915								
United States (a)	28	49,520	38	91,978	13	35,058	1	3,093		
United States (b)	2	45								
Argentina (a)			1	3,547	1	2,485				
Total	60	152,674	47	129,526	20	54,180	5	13,746		
North East Harbour, N.S.—										
Sea Fisheries (b)	1	12								
North Head, N.B.—										
United States (a)	277	29,259	56	604						
North Sydney, N.S.—										
Great Britain (a)	3	18,936			2	2,429				
Newfoundland (a)	185	215,156	2	38	26	21,016				
Newfoundland (b)	279	20,670	1	87						
Belgium (a)	3	8,279								
France (a)										
Germany (a)	2	3,418			1	1,596				
Italy (a)										
Norway (a)					2	3,209				
St. Pierre (a)	14	4,264								
St. Pierre (b)	39	2,726								
United States (a)	1	975			1	2,510				
United States (b)	2	132	1	14						
Netherlands (a)	5	13,225			1	1,971				
Greenland (a)	1	1,077								
Portugal (a)	2	5,116								
Greece (a)	1	2,780								
Sea Fisheries (a)	3	420								
Sea Fisheries (b)	112	3,748	2	37						
Total	652	300,922	6	176	33	32,731				
Ocean Falls, B.C.—										
Great Britain (a)	6	15,090								
United States (a)	64	117,957	4	5,324						
Total	70	133,047	4	5,324						
Parrsboro, N.S.—										
Great Britain (a)	3	3,977			7	8,352				
United States (a)	6	2,465			4	2,751	1	900		
United States (b)	63	16,923	9	2,239						
Total	72	23,365	9	2,239	11	11,103	1	900		
Pictou, N.S.—										
Great Britain (a)	2	2,215			8	9,191				
Great Britain (b)					1	286				
St. Pierre (b)	2	169								
Total	4	2,384			9	9,477				
Pointe au Pic, Que.—										
Great Britain (a)					2	1,471				
United States (a)					1	671				
Total					3	2,142				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	2,394			1	2,958								45	151,837
1	3,425												1	3,425
								2	8,383				2	8,383
1	3,637							26	98,427				32	119,979
4	11,699							4	13,923	Italy	3	10,381	91	215,652
													2	45
													2	6,032
7	21,155			1	2,958			32	120,733		3	10,381	175	505,353
													1	12
													333	29,863
										Italy	1	3,113	6	24,478
													213	236,210
										Italy	1	127	281	20,884
													3	8,279
		3	571										3	571
													3	5,014
										Italy	2	6,367	2	6,367
													2	3,209
		31	6,645							Spain	1	217	46	11,126
													39	2,726
													2	3,485
													3	146
													6	15,196
													1	1,077
										Spain	1	2,886	3	8,002
													1	2,780
		156	39,235							Italy Spain	2 3	900 1,450	164	42,005
													114	3,785
		190	46,451								11	15,060	892	395,340
													6	15,090
													68	123,281
													74	138,371
													10	12,329
													11	6,116
													72	19,162
													93	37,607
				1	810								11	12,216
													1	286
													2	169
				1	810								14	12,671
													2	1,471
													1	671
													3	2,142

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Port Alberni, B.C.—										
China (a)	1	3,158								
Japan (a)	4	14,162			4	12,862				
United States (a)	7	14,959	19	59,408	4	11,510				
British Oceania (a)							1	2,862		
Sea Fisheries (a)	1	11	1	4						
Total	13	32,290	20	59,412	8	24,372	1	2,862		
Port Alfred, Que.—										
Great Britain (a)	12	20,099			8	15,437				
United States (a)					11	18,143				
Total	12	20,099			19	33,580				
Port Clyde, N.S.—										
Great Britain (a)										
British West Indies (a)	1	238								
Total	1	238								
Port Elgin, N.B.—										
Newfoundland (b)	1	10								
St. Pierre (b)										
Total	1	10								
Port Hastings, N.S.—										
United States (a)			1	203						
Port Hawkesbury, N.S.—										
British West Indies (b)	1	376								
United States (a)			3	4,233	4	3,342				
United States (b)	1	238	3	2,002						
Sea Fisheries (a)	34	4,922	2	143						
Sea Fisheries (b)	6	314								
Total	42	5,850	8	6,378	4	3,342				
Port Mulgrave, N.S.—										
Newfoundland (a)					1	597				
United States (b)	1	452	1	1,906						
Total	1	452	1	1,906	1	597				
Port Wade, N.S.—										
United States (b)	6	644								
Port Williams, N.S.—										
British West Indies (a)	1	286								
United States (a)					3	2,583				
Total	1	286			3	2,583				
Powell River, B.C.—										
Great Britain (a)	1	3,555								
Japan (a)										
United States (a)			83	88,752	2	5,155				
Australia (a)	7	27,849								
New Zealand (a)	7	25,274								
Argentina (a)			10	35,754	4	10,342				
Total	15	56,678	93	124,506	6	15,497				

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	3,158
1	3,636							6	23,988				15	54,648
1	2,675							3	9,565				34	98,117
													1	2,862
													2	15
2	6,311							9	33,553				53	158,800
1	1,460												21	36,996
1	1,116												12	19,259
2	2,576												33	56,255
1	1,460												1	1,460
													1	238
1	1,460												2	1,698
													1	10
		2	63										2	63
		2	63										3	73
													1	203
													1	376
													7	7,575
													4	2,240
													36	5,065
													6	314
													54	15,570
													1	597
													2	2,358
													3	2,955
													6	644
													1	286
													3	2,583
													4	2,869
													1	3,555
								1	4,474				1	4,474
													85	93,907
													7	27,849
													7	25,274
													14	46,096
								1	4,474				115	201,155

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea, etc.—Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Prince Rupert, B.C.—										
Great Britain (a)	10	31,685	2	1,796						
Germany (a)	2	7,350								
Netherlands (a)	4	12,209					2	7,279		
Italy (a)	1	3,012								
Portugal (a)	3	9,059								
United States (a)	193	155,981	998	72,879						
Japan (a)										
Sea Fisheries (a)	956	10,368	88	855						
Total	1,169	229,664	1,088	75,550			2	7,279		
Pugwash, N.S.—										
Great Britain (a)	2	2,208			3	2,015	1	1,281		
United States (a)	4	1,433								
Total	6	3,641			3	2,015	1	1,281		
Quatsino, B.C.—										
Japan (a)										
United States (a)	3	1,362	3	12,584						
Total	3	1,362	3	12,584						
Quebec, Que.—										
Great Britain (a)	72	541,407	1	231	2	2,739				
British West Indies (a)	1	1,887								
Newfoundland (a)	33	43,917								
Belgium (a)	44	209,281			1	3,533				
France (a)	1	1,447			5	13,300				
Germany (a)	15	120,103			15	43,453				
Netherlands (a)					16	45,419				
Italy (a)										
United States (a)	4	32,263	17	37,948						
Colombia (a)	4	13,410								
French Africa (a)										
Greenland (a)					1	943				
Portugal (a)	2	5,661								
Russia (a)										
Total	176	969,376	18	38,179	40	109,387				
Richibuctou, N.B.—										
Great Britain (b)										
St. Pierre (b)	1	78								
United States (a)					3	3,043				
United States (b)			1	629						
Total	1	78	1	629	3	3,043				
Rimouski, Que.—										
Great Britain (a)	2	3,249			1	1,357				
United States (a)	50	57,905	14	16,430			1	1,018		
Total	52	61,154	14	16,340	1	1,357	1	1,018		
Riverport, N.S.—										
Sea Fisheries (a)	2	21								
Sea Fisheries (b)	28	2,999								
Total	30	3,020								
St. Andrews, N.B.—										
United States (a)	841	36,928	517	8,106						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
								1	4,280				13	37,761
													2	7,350
								2	8,481				8	27,969
													1	3,012
													3	9,059
													1,191	228,880
								1	5,196				1	5,196
													1,044	11,223
								4	17,957				2,263	330,450
						1	801						7	6,305
													4	1,433
						1	801						11	7,738
		1	4,164					4	14,548				5	18,712
													6	13,946
		1	4,164					4	14,548				11	32,658
													75	544,377
													1	1,887
						1	2,987						34	46,904
						1	2,226			Italy	1	5,976	47	221,016
						1	2,006						7	16,753
						2	7,028			Italy	1	5,976	33	176,560
						4	13,453			Italy Jugo Slavia	2 1	10,042 3,783	23	72,697
										Italy	4	17,014	4	17,014
													21	70,211
													4	13,410
								1	4,293				1	4,293
													1	943
													2	5,661
										Russia	3	12,480	3	12,480
						9	27,700	1	4,293		12	55,271	256	1,204,206
3	837												3	837
													1	78
1	908												4	3,951
													1	629
4	1,745												9	5,495
													3	4,606
													65	75,353
													68	79,959
													2	21
													28	2,999
													30	3,020
													1,358	45,034

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
St. George, N.B.—										
United States (a)	7	51	34	1,040						
United States (b)			1	258						
Total	7	51	35	1,298						
St. John, N.B.—										
Great Britain (a)	75	425,473	1	3,759	6	4,859	1	880	1	547
British West Indies (b)	5	2,017								
Newfoundland (a)	1	455								
Belgium (a)	2	13,106								
Denmark (a)										
Cuba (a)	8	14,356	1	2,223	10	10,645				
France (a)	2	19,716			4	11,118				
Germany (a)	4	12,183			9	26,043				
Netherlands (a)	1	2,313								
Italy (a)	2	4,443								
Norway (a)					11	20,852				
Uruguay (a)	1	2,380			1	2,648				
British South Africa (a)	1	4,462								
British West Africa (a)	4	15,602								
Egypt (a)	3	9,429								
United States (a)	190	68,665	296	216,817	9	9,553				
United States (b)	44	19,913	68	20,644						
New Zealand (a)	3	8,880								
Sea Fisheries (a)	21	184								
Total	367	623,577	366	243,443	50	85,718	1	880	1	547
St. Peters, N.S.—										
United States (a)					13	12,106				
St. Stephen, N.B.—										
United States (a)	3	90	7	2,868						
Salmon River, N.S.—										
United States (b)	2	272								
Sandy Point, N.S.—										
United States (b)	5	1,061	11	3,367						
Sea Fisheries (b)	1	32	84	5,518						
Total	6	1,093	95	8,885						
Sheet Harbour, N.S.—										
Great Britain (a)							1	637		
United States (a)					16	14,305				
Total					16	14,305	1	637		
Shelburne, N.S.—										
British West Indies (b)	3	728								
Newfoundland (a)	1	894								
Newfoundland (b)	2	157								
St. Pierre (a)	1	421								
St. Pierre (b)	1	80								
United States (a)	1	121								
United States (b)	3	127	3	78						
Sea Fisheries (b)	2	124	69	4,555						
Total	14	2,652	72	4,633						
Sherbrooke, N.S.—										
United States (a)	1	790			13	13,498	7	6,994		
United States (b)	5	1,851								
Total	6	2,641			13	13,498	7	6,994		

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													41	1,091
													1	258
													42	1,349
1	880			1	813								86	437,211
													5	2,017
													1	455
						2	7,023						4	20,129
3	5,787												3	5,787
10	12,944												29	40,168
										Italy	1	3,663	7	34,497
													13	38,226
													1	2,313
		2	4,428							Italy Greece	20 2	68,450 5,378	26	82,699
													11	20,852
1	2,307												3	7,335
													1	4,462
													4	15,602
													3	9,429
2	1,896			1	1,225	1	1,226			Italy	1	1,283	500	300,665
													112	40,557
													3	8,880
													21	184
17	23,814	2	4,428	2	2,038	3	8,249				24	78,774	833	1,071,468
													13	12,106
													10	2,958
													2	272
													16	4,428
													85	5,550
													101	9,978
				1	814					Peru	1	1,295	3	2,746
				1	1,091								17	15,396
				2	1,905						1	1,295	20	18,142
						1	97						4	825
													1	894
													2	157
													1	421
													1	80
													1	121
													6	205
													71	4,679
						1	97						87	7,382
1	1,290												22	22,572
													5	1,851
1	1,290												27	24,423

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Shippegan, N.B.—										
United States (a)							1	905		
Russia (b)										
Sea Fisheries (b)	26	365								
Total	26	365					1	905		
Sidney, B.C.—										
United States (a)	38	6,616	457	146,383						
United States (b)	7	858	6	3,251						
Total	45	7,474	463	149,634						
Sorel, Que.—										
Great Britain (a)							1	3,705		
Newfoundland (a)	2	560								
Netherlands (a)										
United States (a)			1	1,431						
Total	2	560	1	1,431			1	3,705		
Souris, P.E.I.—										
Newfoundland (b)	1	64								
St. Pierre (b)	7	553								
United States (a)			1	1,431						
Total	8	617	1	1,431						
Steveston, B.C.—										
United States (a)	16	695	45	1,257						
Stewart, B.C.—										
United States (a)	17	6,879	6	8,451						
Summerside, P.E.I.—										
United States (a)					2	3,278	1	911		
United States (b)	3	1,000								
Total	3	1,000			2	3,278	1	911		
Sydney, N.S.—										
Great Britain (a)	15	26,911			18	21,144	2	2,088		
British West Indies (a)					1	2,244				
Newfoundland (a)	39	67,758			74	241,154				
Newfoundland (b)	3	214	3	82						
Belgium (a)	3	4,729								
Greece (a)										
British India (a)	3	11,421								
France (a)	1	1,447								
Germany (a)	9	24,998								
Netherlands (a)	9	23,497			1	1,892				
Italy (a)	2	3,455								
Norway (a)					3	6,140				
Japan (a)	4	15,506								
Denmark (a)	1	1,867			2	2,514				
St. Pierre (a)	1	497								
St. Pierre (b)	3	312								
Greenland (a)					1	943				
Sweden (a)	2	3,701								
United States (a)	6	14,056	4	4,808	5	7,225				
United States (b)	1	83	3	130						

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													1	905
1	317												1	317
													26	365
1	317												28	1,587
													495	152,999
													13	4,109
													508	157,108
													1	3,705
													2	560
						1	2,209						1	2,209
						1	2,987						2	4,418
						2	5,196						6	10,892
													1	64
		1	30										8	583
													1	1,431
		1	30										10	2,078
													61	1,952
													23	15,330
													3	4,189
													3	1,000
													6	5,189
1	880			2	1,626								38	52,649
													1	2,244
													113	308,912
													6	296
				1	2,960					Italy	3	10,636	8	20,735
										Greece	1	2,410		
										Italy	1	3,509	5	12,848
										Greece	4	9,339		
													3	11,421
										Italy	1	3,384	4	11,444
										Greece	2	6,613		
										Spain	1	3,210		
2	4,922					2	4,761	1	4,280	Greece	1	2,946	19	56,505
										Jugo Slavia	1	3,296		
										Italy	2	8,092		
										Italy	1	3,391	11	28,780
				1	2,960			2	13,023	Italy	12	41,372	19	67,680
										Greece	2	6,870		
													3	6,140
													4	15,506
													3	4,381
		4	609										5	1,106
													3	312
													1	943
										Greece	1	2,313	3	6,014
1	1,709	1	2,546							Italy	1	3,910	18	34,254
													4	213

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Continued*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Sydney, N.S.—*Con.*										
Argentina (a)										
British South Africa (a)	7	26,950			1	943				
New Zealand (a)	11	34,854			1	2,098	2	2,088		
Australia (a)	3	9,994								
Portugal (a)	1	3,131								
Gibraltar (a)	1	4,088								
Sea Fisheries (a)	6	888								
Sea Fisheries (b)	3	135	22	547						
Total	134	280,492	32	5,567	107	286,297	4	4,176		
Three Rivers, Que.—										
Great Britain (a)	35	115,874			7	14,181				
United States (a)	1	1,848			2	1,403				
Uruguay (a)					1	2,648				
Total	36	117,722			10	18,232				
Truro, N.S.—										
United States (b)	5	1,141	1	475						
Union Bay, B.C.—										
Great Britain (a)	8	23,715								
British West Indies (a)	6	17,718								
Belgium (a)	1	3,043								
China (a)	1	3,221								
Netherlands (a)	3	9,271								
Japan (a)	3	8,845			1	2,957				
United States (a)	33	80,663	28	5,967						
British Oceania (a)	2	7,378								
British South Africa (a)					1	3,250				
Total	57	153,854	28	5,967	2	6,207				
Vancouver, B.C.—										
Great Britain (a)	161	586,945	16	62,224	12	40,289	1	3,655		
British West Indies (a)	7	21,131			4	10,985				
Denmark (a)										
Belgium (a)	6	20,896	1	3,114						
China (a)	1	3,158	12	52,869						
France (a)	5	15,687								
Germany (a)	18	63,984	1	3,114	5	14,371				
Netherlands (a)	22	73,731			1	2,724				
Italy (a)	3	12,068								
Norway (a)					6	26,497	1	2,311		
Japan (a)	26	126,588	3	12,742	9	28,795	2	5,724		
French Oceania (a)										
Chile (a)					2	5,672	1	3,151		
Colombia (a)			21	37,509						
Argentina (a)			8	28,734	5	12,827				
Sweden (a)							9	26,599		
United States (a)	968	1,452,649	388	655,298	20	63,789				
New Zealand (a)	13	48,488	12	42,228						
Australia (a)	20	142,283	8	27,855	4	10,696	11	31,654		
British South Africa (a)	5	16,539			3	9,780				
Hong Kong (a)	28	235,556								
Mexico (a)	4	1,325								
Uruguay (a)			2	7,026						
Peru (a)			2	6,443	3	7,431				
Brazil (a)			1	3,541						
Sea Fisheries (a)	125	1,924	1	39						
Fiji Islands (a)			2	1,434						
Total	1,412	2,822,952	478	944,170	74	233,856	25	73,094		

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Suite*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
.....	.....	.....	.....	.....	.....	1	1,876	.....	.....	.....	.....	.....	1	1,876
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	27,893
.....	.....	.....	.....	.....	.....	1	2,789	.....	.....	.....	.....	.....	15	41,829
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	9,994
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,131
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	2	5,668	3	9,756
.....	.....	18	4,296	.....	.....	.....	.....	.....	.....	Spain.....	3	1,450	27	6,634
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	682
4	7,511	23	7,451	4	7,546	4	9,426	3	17,303	.....	39	118,409	354	744,178
4	11,282	.....	.....	2	6,014	2	5,770	.....	.....	Italy.....	7	26,660	57	179,781
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3,251
.....	.....	.....	.....	.....	.....	1	1,876	.....	.....	.....	.....	.....	2	4,524
4	11,282	.....	.....	2	6,014	3	7,646	.....	.....	.....	7	26,660	62	187,556
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	1,616
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	23,715
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	17,718
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	865	2	3,908
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,221
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	9,271
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	11,802
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Italy.....	1	3,899	62	90,529
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	7,378
.....	.....	.....	.....	1	2,598	.....	.....	.....	.....	.....	.....	.....	2	6,208
.....	.....	.....	.....	1	2,958	.....	.....	.....	.....	.....	2	4,764	90	173,750
4	17,929	2	8,555	.....	.....	16	84,511	3	13,023	Guatemala	1	344	219	828,084
										Italy.....	3	10,609		
2	5,369	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	37,485
6	27,389	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	27,389
2	7,166	13	50,279	3	11,038	3	14,762	1	5,056	Italy.....	1	865	30	113,176
.....	.....	.....	.....	.....	.....	.....	.....	13	65,743	China.....	2	5,997	28	127,767
.....	.....	6	20,730	.....	.....	.....	.....	.....	.....	Italy.....	1	3,319	12	39,736
1	4,247	.....	.....	18	59,222	1	5,235	.....	.....	Italy.....	2	7,411	46	157,584
.....	.....	.....	.....	.....	.....	4	20,919	.....	.....	.....	.....	.....	27	97,374
.....	.....	.....	.....	.....	.....	.....	.....	1	4,260	Italy.....	16	69,519	20	85,847
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	28,808
7	23,572	1	4,164	.....	.....	.....	.....	132	561,551	China.....	15	59,004	195	822,140
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Guatemala..	1	865	1	865
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	8,823
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	37,509
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	41,561
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	26,599
5	15,712	.....	.....	.....	.....	.....	.....	15	63,687	Italy.....	3	10,381	1,403	2,271,945
										China.....	3	9,515		
										Panama...	1	914		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	90,716
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43	212,488
.....	.....	.....	.....	1	2,958	.....	.....	.....	.....	China.....	1	3,320	10	32,597
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	235,556
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	1,325
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	7,026
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	13,874
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,541
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	126	1,963
.....	.....	1	496	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1,930
27	101,384	23	84,224	22	73,218	24	125,427	165	713,320	.....	50	182,063	2,300	5,353,708

No. 14.—Statement of the Number and Tonnage of Steam and Sailing Vessels entered Outwards, *for Sea*, etc.—*Concluded*

Ports and Outports and Countries for which Departed — Ports et ports secondaires et pays de destination	Great Britain — Grande-Bretagne		United States — États-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
Victoria, B.C.—										
Great Britain (a)	2	3,713			1	4,121				
British West Indies (a)	2	6,731			1	2,391				
Australia (a)	11	99,265			1	2,864				
New Zealand (a)	2	18,314								
China (a)	10	79,660	9	75,575						
British South Africa (a)	1	3,149			2	4,943				
Japan (a)	24	208,978	17	142,557						
For Sea (a)	34	686	118	1,048						
Mexico (a)	1	30								
United States (a)	734	905,349	820	1,177,729	2	5,722				
United States (b)	81	13,979	74	28,273						
Total	902	1,339,854	1,038	1,425,182	7	20,041				
Wallace, N.S.—										
United States (b)			1	1,109						
Westport, N.S.—										
United States (a)	5	156	14	195						
Weymouth, N.S.—										
Great Britain (a)	1	757			1	626				
British West Indies (b)	4	1,308								
Cuba (b)	2	790								
St. Pierre (b)	2	106								
United States (a)					2	1,098				
United States (b)	11	2,228	3	610						
Total	20	5,189	3	610	3	1,724				
White Rock, B.C.—										
United States (a)	12	393	3	42						
United States (b)	3	710								
Total	15	1,103	3	42						
Windsor, N.S.—										
United States (a)	81	151,979			68	60,287	1	911		
United States (b)	17	5,827	20	14,414						
Total	98	157,806	20	14,414	68	60,287	1	911		
Winnipeg, Man.—										
Great Britain (a)	1	1,487								
Yarmouth, N.S.—										
Newfoundland (a)	1	893								
Newfoundland (b)	2	60								
Cuba (b)										
St. Pierre (b)	17	1,510								
United States (a)	117	108,828	45	121,169	1	689				
United States (b)	5	607	34	2,294						
Sea Fisheries (a)	22	1,364	51	2,728						
Total	164	113,262	130	126,191	1	689				
York Factory, Man.—										
Great Britain (a)	1	1,487								

(a) Steam—Vapeurs. (b) Sail—Voiliers.

N° 14.—ÉTAT du nombre et du tonnage des long-courriers à voiles et à vapeur, déclarés *à la sortie*, etc.—*Fin*

Denmark — Danemark		France — France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres nationalités			Total	
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
													3	7,834
													3	9,122
													12	102,129
													2	18,314
													19	155,235
				1	2,958								4	11,050
1	3,637							38	184,054				80	539,226
										Undocumented...	1	1,284	153	3,018
													1	30
1	2,532	1	2,889					50	238,749	Undocumented..	1	1,284	1,612	2,341,669
										Mexico.....	1	275		
										Italy.....	2	7,140		
													155	42,252
2	6,169	1	2,889	1	2,958			88	422,803		5	9,983	2,044	3,229,879
													1	1,109
													19	351
2	2,097												4	3,480
													4	1,308
													2	790
													2	106
													2	1,098
													14	2,838
2	2,097												28	9,620
													15	435
													3	710
													18	1,145
4	3,049			2	2,182								156	218,408
													37	20,241
4	3,049			2	2,182								193	238,649
													1	1,487
													1	893
													2	60
		1	37										1	37
													17	1,510
													163	230,686
													39	2,901
													73	4,092
		1	37										296	240,179
													1	1,487

No. 15.—Summary Statement of the Nationality of Sea-going Vessels entered Outwards, *for Sea*, for each Country

No.	Countries for which departed — Pays de destination	British — Anglais		United States — Etats-Unis		Norway — Norvège		Sweden — Suède		Belgium — Belgique	
		Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré
1	Great Britain	977	4,461,985	28	102,001	118	179,934	13	25,427	2	3,618
2	Australia	62	352,697	8	27,855	5	13,560	11	31,654		
3	British South Africa	22	84,202			7	18,916				
4	British West Africa	4	15,602								
5	British Guiana	41	98,138			19	19,567	11	12,480		
6	British Honduras	8	17,568								
7	British India	3	11,421								
8	British West Indies	84	127,130	2	4,406	19	29,393	27	28,092		
9	British Oceania, Other	5	17,743			1	2,864	4	11,048		
10	Fiji Islands			2	1,434						
11	Gibraltar	1	4,088								
12	Hong Kong	28	235,556								
13	Irish Free State	12	36,814								
14	Newfoundland	900	661,948	12	732	139	289,753	2	2,995		
15	New Zealand	53	189,901	12	42,228	1	2,098	2	2,088		
16	Argentina			19	68,035	11	28,488				
17	Belgium	92	357,766	1	3,114	3	10,598				
18	Brazil	4	3,382	1	3,541	1	2,648				
19	Chile					2	5,672	1	3,151		
20	China	13	89,197	22	129,667						
21	Colombia	32	165,996	22	41,861						
22	Cuba	27	47,702	2	4,446	15	15,365	1	855		
23	Denmark	3	5,633			6	9,677	1	1,282		
24	Ecuador	2	5,896								
25	Egypt	3	9,429								
26	France	15	60,185			19	51,861				
27	French Africa	1	2,451								
28	French Oceania										
29	Germany	143	502,236	4	8,516	64	175,834				
30	Greece	6	17,440			1	2,561				
31	Greenland	1	1,077			2	1,886				
32	Italy	20	52,154								
33	Japan	73	414,748	22	158,547	16	52,858	3	8,586		
34	Lettonia	1	1,819								
35	Mexico	7	7,631	18	81,434						
36	Morocco										
37	Netherlands	99	290,665			39	108,264	2	7,279		
38	Norway					49	120,866	1	2,311		
39	Peru	14	79,899	3	12,421	3	7,431				
40	Poland	1	3,042								
41	Porto Rico	21	2,801								
42	Portugal	13	33,334								
43	Russia										
44	St. Pierre	167	25,948			2	1,096	1	899		
45	Sea Fisheries	2,568	121,703	1,158	36,557						
46	Spain	1	3,210								
47	Sweden	4	7,402			4	7,196	17	77,527		
48	United States	5,826	4,848,420	5,209	3,318,520	407	623,415	40	169,391		
49	Uruguay	3	8,246	2	7,026	2	5,296				
50	Venezuela	4	13,727								
51	For Sea	66	30,489	119	1,056						
	Total	11,430	13,528,421	6,666	4,053,407	955	1,787,097	137	385,065	2	3,618

N° 15.—ÉTAT SOMMAIRE des long-courriers déclarés *à la sortie*, pour chaque pays

Denmark — Danemark		France		Germany — Allemagne		Netherlands — Pays-Bas		Japan — Japon		Other Nationalities — Autres pays			Total		
Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	Flag — Drapeau	Vessels — Navires	Tons Register — Tonnage enregistré	Vessels — Navires	Tons Register — Tonnage enregistré	No.
19	39,856	3	10,606	11	14,953	23	98,717	4	17,303	Peru Italy Guatemala	2 11 1	2,590 40,382 344	1,212	4,997,726	1
						2	4,926						88	430,692	2
1	2,394			3	8,874			1	3,320	China	1	3,320	35	121,026	3
													4	15,602	4
5	7,289									Russia	1	1,116	77	138,590	5
													8	17,568	6
													3	11,421	7
10	19,893					1	97						143	209,011	8
													10	31,655	9
		1	496										3	1,930	10
										Italy	2	5,668	3	9,756	11
													28	235,556	12
													12	36,814	13
1	113					2	5,951			Portugal Italy	1 1	147 127	1,058	961,766	14
						2	5,578						70	241,893	15
						1	1,876						31	98,399	16
2	7,166	17	62,143	5	16,958	16	51,909	1	5,056	Greece Italy	3 10	8,408 32,888	150	556,006	17
2	4,614					1	1,876						9	16,061	18
													3	8,823	19
								17	83,368	China	2	5,997	54	308,229	20
													54	207,857	21
12	15,408	1	37	2	5,817								60	89,630	22
29	84,112			1	2,298	2	4,659						42	107,661	23
													2	5,896	24
													3	9,429	25
		11	26,982			1	2,006	1	4,800	Greece Spain Italy	4 2 10	13,226 7,060 35,307	63	201,427	26
								1	4,293				2	6,744	27
										Guatemala	1	865	1	865	28
6	15,655	2	4,870	20	63,982	23	60,504	2	8,560	Italy Greece Jugo Slavia Finland Spain	32 3 3 1 6	120,743 9,091 10,390 2,889 20,068	309	1,003,338	29
										Greece Italy	12 4	29,399 13,720	23	63,120	30
													3	2,963	31
		4	10,213	2	5,920	2	4,113	5	26,342	Greece Italy Spain Jugo Slavia	6 108 2 3	19,122 384,680 6,867 10,756	152	520,167	32
10	34,482	2	8,328					237	1,007,724	China	16	62,919	379	1,748,192	33
													1	1,819	34
										Mexico	1	3,237	26	92,302	35
										Russia	1	70	1	70	36
		4	11,045	1	1,958	42	124,025	2	8,481	Italy Jugo Slavia Greece	16 2 1	61,436 7,252 2,439	208	622,844	37
2	7,676												52	130,853	38
													20	99,751	39
													1	3,042	40
													21	2,801	41
										Portugal Spain	1 1	2,986 2,886	15	39,206	42
1	317									Russia	3	12,480	4	12,797	43
		65	12,454							Spain	2	240	237	40,637	44
		238	67,578							Italy Spain	2 9	900 4,575	3,975	231,313	45
													1	3,210	46
5	7,318									Greece	2	4,626	32	104,069	47
81	305,898	19	94,658	28	151,485	22	179,419	74	332,872	Italy China Peru Panama Mexico Undocumented	13 6 1 1 1 1	43,468 16,368 1,169 914 275 1,284	11,729	10,087,556	48
1	2,307					1	1,876						9	24,751	49
										Mexico	1	3,237	5	16,964	50
10	11,160									Undocumented	1	1,284	196	43,989	
197	565,658	367	309,410	73	272,245	141	547,532	345	1,502,119		314	1,019,215	20,627	23,973,787	

No. 16.—STATEMENT showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes between Canada and the United States (exclusive of Ferriage) which arrived at each Port and Outport

N° 16.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens et des États-Unis naviguant sur les rivières et les lacs entre le Canada et les États-Unis (à l'exclusion des traversiers) arrivés à chaque port et ports secondaires

VESSELS ARRIVED—NAVIRES ARRIVÉS

Ports and Outports — Ports et ports secondaires	Canadian—Canadiens						United States—États-Unis					
	Steam and Motor—Vapeurs			Sail—Voiliers			Steam and Motor—Vapeurs			Sail—Voiliers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Amherstburg, Ont.	13	12,189	283				1,618	374,801	17,004			
Bath, Ont.	1	161	10	5	446	16	3	109	8			
Belle River, Ont.							300	1,421	598			
Belleville, Ont.	159	53,847	2,571	40	18,690	203	65	298	118			
Blind River, Ont.							39	17,368	557	11	5,723	74
Bridgeburg, Ont.	90	90	180	2	2	4	78	2,730	324	25	6,547	29
Brighton, Ont.	41	44,561	2,162				1	5	2			
Brockville, Ont.	237	166,207	10,188				422	27,272	2,469			
Bruce Mines, Ont.	4	91	13				8	66	20			
Byng Inlet, Ont.	43	102,922	969				52	147,560	1,365			
Cardinal, Ont.	54	20,966	622				6	4,296	96			
Chatham, Ont.	45	10,111	1,090	1	285	7	3	30	5	2	376	2
Chicoutimi, Que.	9	8,705	180									
Chippawa, Ont.	27	189	61				6	24	12			
Cobourg, Ont.	636	2,089,054	22,698									
Cockburn Island, Ont.	6	621	45				21	3,970	162	14	6,457	127
Collingwood, Ont.	1	1,126	20				5	13,518	130			
Courtright, Ont.	3	5,792	70				188	2,723	446	9	3,861	24
Dawson, Y.T.				2	424	2	8	4,824	249			
Depot Harbour, Ont.	47	67,791	1,074				67	165,111	1,837			
Deseronto, Ont.							1	5	2			
Erieau, Ont.	17	200	46				285	182,496	4,069			
Fort William, Ont.	183	594,682	7,242				494	1,752,797	14,298	10	20,973	108
Gananoque, Ont.	1,801	86,460	5,737				2,991	23,936	5,984			
Georgeville, Que.	2	60	8	3	3	4						
Goderich, Ont.	4	4,796	103				14	36,547	490			
Gore Bay, Ont.							61	4,960	311			
Hamilton, Ont.	32	34,787	780				22	11,804	419	24	10,372	24
Hull, Que.										83	10,897	166
Iroquois, Ont.							2	376	16			
Kenora, Ont.	25	455	81				149	4,944	580			
Key Harbour, Ont.	21	46,754	483				1	2,878	25			
Kincardine, Ont.	4	5,308	107				3	8,494	99			
Kingston, Ont.	818	564,468	34,406	120	25,805	478	489	5,141	850			
Kingsville, Ont.							387	3,921	811			
Leamington, Ont.							3	15	5			

Levis, Que.	2	1,722	40									
Little Current, Ont.	62	91,999	1,257	1	664	7	9	19,137	199			
Magog, Que.	1	50	5									
Meaford, Ont.							3	5,285	76			
Michipicoten Harbour, Ont.							15	19,789	338	3	6,513	25
Midland, Ont.	57	152,976	1,403	2	5,817	24	67	219,232	1,845	2	3,169	18
Montreal, Que.	654	733,807	12,917				357	382,763	7,159			
Morrisburg, Ont.	2	120	18	2	740	8	12	955	102			
Napanee, Ont.				3	555	15						
Niagara, Ont.	484	400,783	30,685									
Niagara Falls, Ont.	447	423,148	31,210									
Ottawa, Ont.										7	1,065	14
Owen Sound, Ont.	18	31,435	351	2	1,328	14	25	74,299	698			
Parry Sound, Ont.							22	29,972	2,768			
Paspebiac, Que.							3	4,788	69			
Penetanguishene, Ont.							3	4,531	72			
Picton, Ont.	12	1,696	119	11	2,078	48						
Point Edward, Ont.	163	361,997	6,019	1	285	7	190	10,551	721	78	3,777	93
Port Alfred, Que.	1	1,407	100									
Port Arthur, Ont.	86	113,220	2,109	8	13,795	48	560	1,785,982	14,456	45	67,297	393
Port Burwell, Ont.	4	109	24				1	3	2			
Port Colborne, Ont.	887	646,790	8,298				264	119,424	2,695	4	12,247	57
Port Dalhousie, Ont.	116	2,246	322	1	705	3	67	6,188	687			
Port Dover, Ont.	177	1,563	515				298	98,370	8,839			
Port Hope, Ont.	1	161	10	1	5	2						
Port Maitland, Ont.	164	2,854	387				56	46,883	756			
Port McNicoll, Ont.	9	20,240	221				79	287,532	2,185			
Port Menier, Que.				1	707	3						
Port Stanley, Ont.	10	10,000	200				155	169,000	9,500			
Prescott, Ont.	138	159,634	9,500	3	1,649	12	323	8,549	1,553			
Quebec, Que.	43	48,744	1,011				4	3,925	78	205	23,397	410
Rainy River, Ont.	6	206	24				39	286	63			
Rimouski, Que.	49	56,232	1,013				14	16,430	301			
Rockport, Ont.	56	224	56				489	1,956	978			
Sandwich, Ont.	15	6,803	354	4	392	24	6,165	27,149	17,698	13	3,577	59
Sarnia, Ont.	310	31,407	1,682	79	16,561	322	791	235,438	22,687	113	75,183	401
Sault Ste. Marie, Ont.	341	333,315	4,271				394	482,537	5,014	16	7,909	101
Sorel, Que.				2	1,864	14	1	1,431	24	17	1,807	34
St. Johns, Que.				22	2,236	44	69	3,023	580	204	26,393	408
Stickeen, B.C.	6	39	7				36	1,240	198			
Thessalon, Ont.	16	661	71				47	19,724	579	7	3,879	46
Thorold, Ont.	1	1,254	20							4	1,705	4
Three Rivers, Que.	25	25,280	492				25	26,470	550	95	16,061	190
Toronto, Ont.	930	892,372	60,678	1	989	6	50	8,861	269			
Trenton, Ont.	7	655	46	3	1,092	15	1	7	2			
Valleyfield, Que.	8	993	40									
Walkerville, Ont.	11	21,954	693	3	3,925	33	4,668	67,000	9,847	12	16,628	110
Wallaceburg, Ont.	35	8,787	814				44	59,716	1,475			
Welland, Ont.	16	12,487	250				27	24,010	513	6	3,275	9
West Dock, Ont.	40	8,979	451				224	7,353	645			
Whitby, Ont.	52	240	105				31	366	71			
White Horse, Y.T.							1	603	25			
Wiarton, Ont.	2	2,654	52	1	352	5						
Windsor, Ont.	144	156,320	7,001	2	64	4	346	524,530	9,416	17	5,178	63
Wolfe Island, Ont.	15	34	25	4	160	8	2	4	2	2	26	4
Total	9,946	8,689,990	276,095	330	101,618	1,380	23,769	7,609,732	179,096	1,028	344,292	2,993

No. 16.—Summary Statement of Canadian and United States Vessels trading on Inland Waters, which arrived at Canadian Ports and Outports

N° 16.—État sommaire des navires canadiens et des États-Unis naviguant sur les eaux intérieures, arrivés aux ports du Canada

RECAPITULATION—RÉCAPITULATION

—	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Canadian—Canadiens:—Steam and motor—Vapeurs	9,946	8,689,990	276,095
Sail—Voiliers	330	101,618	1,380
United States—Etats-Unis:—Steam and motor—Vapeurs	23,769	7,609,732	179,096
Sail—Voiliers	1,028	344,292	2,993
Total	35,073	16,745,632	459,564

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

Description	Vessels — Navires	Tons register — Tonnage enregistré
Steam—Vapeurs:—Screw—A hélice	12,818	14,324,956
Paddle—A aubes	2,008	1,818,426
Stern-wheel—Roue à l'arrière	9	5,427
Motor—Moteur	18,880	150,913
Sail—Voiliers—Sailing—A Voile	97	36,903
Barges—Barges	1,261	409,007
Total	35,073	16,745,632

No. 17.—STATEMENT showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes between Canada and the United States (exclusive of Ferriage), which Departed from each Port and Outport

N° 17.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens des États-Unis naviguant sur les rivières et les lacs entre le Canada et les États-Unis (à l'exclusion des traversiers), partis de chaque port ou port secondaires

VESSELS DEPARTED—NAVIRES PARTIS

Ports and Outports — Ports et ports secondaires	Canadian—Canadiens						United States—États-Unis					
	Steam and Motor—Vapeurs			Sail—Voiliers			Steam and Motor—Vapeurs			Sail—Voiliers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Amherstburg, Ont.	17	12,293	263				1,612	378,732	17,041			
Bath, Ont.	1	161	10	2	380	10	3	109	8			
Belle River, Ont.							299	1,453	598			
Belleville, Ont.	168	54,137	2,576	33	15,304	161	66	301	139			
Blind River, Ont.	1	134	9				39	17,368	557	11	5,723	74
Bridgeburg, Ont.	114	114	228	5	5	6	75	1,713	316	24	6,126	30
Brighton, Ont.	39	44,555	2,155				1	5	2			
Brockville, Ont.	245	170,487	10,448				423	27,333	2,474			
Bruce Mines, Ont.	3	628	18				8	66	20			
Byng Inlet, Ont.	24	60,656	557				52	141,945	1,365			
Cardinal, Ont.	54	21,937	622				6	4,296	96			
Chatham, Ont.	46	9,694	1,038	6	1,710	42	3	30	5			
Chicoutimi, Que.	1	892	20									
Chippawa, Ont.	9	115	25				2	8	4			
Cobourg, Ont.	661	2,106,659	22,895									
Cockburn Island, Ont.	7	473	38				21	3,970	161	14	6,457	127
Collingwood, Ont.	8	22,781	191				5	13,518	130			
Courtright, Ont.	2	3,683	60				187	2,698	443	9	3,861	24
Dawson, Y.T.	3	5	3	2	424	2	9	4,825	254			
Depot Harbour, Ont.	54	77,868	1,219				67	166,013	1,790	1	1,916	10
Deseronto, Ont.							1	5	2			
Erieau, Ont.	15	165	43				287	181,313	4,671			
Fort William, Ont.	90	259,298	2,542				501	1,792,528	13,341	10	21,585	89
Gananoque, Ont.	1,801	86,460	5,737				2,991	23,936	5,984			
Georgeville, Que.	2	60	8	3	3	4						
Goderich, Ont.	46	103,175	1,051				22	64,531	715			
Gore Bay, Ont.	1	821	21				61	4,960	311			
Hamilton, Ont.	38	44,646	971				22	11,804	419	24	10,372	24
Hull, Que.										83	10,897	166
Iroquois, Ont.							2	376	16			
Kenora, Ont.	18	155	40				148	4,942	576			
Key Harbour, Ont.	20	44,315	460				1	2,877	25			
Kincardine, Ont.	3	3,981	81				3	8,494	99			
Kingston, Ont.	807	585,847	26,194	159	26,950	653	423	3,665	786			
Kingsville, Ont.							390	4,941	849			
Leamington, Ont.							3	15	5			
Little Current, Ont.	43	5,890	892	3	1,368	19	9	19,137	199			

No. 17.—STATEMENT showing the description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes, etc.—*Concluded*

No. 17.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens et des États-Unis naviguant sur les rivières et les lacs, etc.—*Fin*

VESSELS DEPARTED–*Con.*—NAVIRES PARTIS–*Fin*

Ports and Outports — Ports et ports secondaires	Canadian—Canadiens						United States—États-Unis					
	Steam and Motor—Vapeurs			Sail—Voiliers			Steam and Motor—Vapeurs			Sail—Voiliers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Magog, Que.	1	50	5									
Meaford, Ont.							3	5,285	76			
Michipicoten Harbour, Ont.							15	19,789	338	3	6,513	25
Midland, Ont.	60	185,825	1,483	2	5,996	26	69	223,206	1,878	2	3,169	15
Montreal, Que.	1,233	1,381,945	24,461	1	885	6	386	436,204	7,000			
Morrisburg, Ont.	2	120	15	1	370	4	11	935	99			
Napanee, Ont.				3	555	15						
Niagara, Ont.	292	250,328	19,662									
Niagara Falls, Ont.	611	565,766	41,834									
Ottawa, Ont.										7	1,065	14
Owen Sound, Ont.	24	56,734	538	2	1,328	14	30	88,264	825			
Parry Sound, Ont.							22	29,972	2,768			
Paspebiac, Que.							7	11,172	161			
Penetaguishene, Ont.							3	4,531	72			
Picton, Ont.	9	976	63	11	2,078	48						
Point Edward, Ont.	155	340,451	6,262				189	10,680	734	78	3,777	93
Port Alfred, Que	4	3,964	80									
Port Arthur, Ont.	140	769,085	5,679	6	7,452	30	579	1,875,506	16,010	46	65,259	402
Port Burwell, Ont.	3	105	20									
Port Colborne, Ont.	1,105	1,328,919	12,811	1	748	6	252	101,415	2,373	4	12,247	73
Port Dalhousie, Ont.	166	11,851	547				65	6,966	698			
Port Dover, Ont.	148	1,411	448	1	6	4	325	98,495	8,904			
Port Hope, Ont.	2	1,083	30	1	5	2						
Port Maitland, Ont.	176	1,640	392				50	46,900	729			
Port McNicoll, Ont.	15	47,465	389				84	316,528	2,331			
Port Stanley, Ont.	10	10,000	200				155	169,000	9,500			
Prescott, Ont.	82	71,368	4,368	2	1,519	9	323	8,549	1,553			
Quebec, Que.	55	65,406	1,171	3	153	7	2	3,250	59	142	15,398	284
Rainy River, Ont.	14	595	74				41	207	63			
Rimouski, Que.	49	56,232	1,013				14	16,340	301			
Rockport, Ont.	56	224	56				477	1,908	954			
Sandwich, Ont.	20	11,577	418	4	294	15	6,116	38,796	16,801	17	5,186	66
Sarnia, Ont.	293	52,464	2,066	52	8,169	132	788	238,708	22,625	110	73,345	447
Sault Ste. Marie, Ont.	563	316,386	5,461	1	352	6	397	476,055	4,802	16	7,909	101
Sorel, Que.	10	11,443	200							17	1,807	34
St. Johns, Que.				10	1,151	21	69	3,023	580	406	54,102	812

Stickeen, B.C.	7	40	13				36	1,256	184			
Thessalon, Ont.	20	2,342	114				47	19,724	579	7	3,879	46
Thorold, Ont.	82	92,021	1,652							4	1,705	4
Three Rivers, Que.	25	25,280	492				25	26,470	547	101	16,755	183
Toronto, Ont.	972	900,103	59,991	4	2,814	23	44	6,928	220			
Trenton, Ont.	11	1,164	79	8	2,659	38	1	7	2			
Valleyfield, Que.	8	993	40									
Walkerville, Ont.	7	7,061	117	4	3,727	40	4,209	56,762	27,139	13	20,220	125
Wallaceburg, Ont.	54	15,870	939	15	4,275	104	45	59,843	1,432			
Welland, Ont.	48	48,902	884				18	14,336	316	7	4,275	10
West Dock, Ont.	41	8,980	451				223	7,390	601			
Whitby, Ont.	55	254	114				28	356	65			
White Horse, Y.T.							1	603	25			
Wiarton, Ont.	2	2,654	52									
Windsor, Ont.	173	179,089	7,710				346	521,166	8,426	16	4,442	60
Wolf Island, Ont.	13	28	22	3	120	6	2	4	2	2	26	4
Total	11,157	10,550,279	282,831	348	90,800	1,453	23,239	7,834,436	195,173	1,174	368,016	3,342

No. 17.—SUMMARY STATEMENT of Canadian and United States Vessels, trading on Inland Waters, which Departed from Canadian Ports

N° 17.—ÉTAT SOMMAIRE des navires canadiens et des États-Unis naviguant sur les eaux intérieures, partis des ports du Canada

RECAPITULATION—RÉCAPITULATION

—	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Canadian—Canadiens:—Steam and motor—Vapeurs	11,157	10,550,279	282,831
Sail—Voiliers	348	90,800	1,453
United States—États-Unis:—Steam and motor—Vapeurs	23,239	7,834,436	195,173
Sail—Voiliers	1,174	368,016	3,342
Total	35,918	18,843,531	482,799

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

Description	Vessels — Navires	Tons register — Tonnage enregistré
Steam—Vapeurs:—Screw—À hélice	13,973	16,492,836
Paddle—À aubes	1,989	1,733,932
Stern-wheel—Roue à l'arrière	9	5,427
Motor—Moteur	18,425	152,520
Sail—Voiliers:—Sailing—À voile	146	110,361
Barges—Barges	1,376	348,455
Total	35,918	18,843,531

No. 18.—STATEMENT showing the Description, Number and Tonnage of Canadian and United States Vessels trading on the Rivers and Lakes between Canada and the United States (exclusive of Ferriage), which Arrived and Departed.

N° 18.—ÉTAT indiquant la description, le nombre et le tonnage des navires canadiens et des États-Unis naviguant sur les rivières et les lacs entre le Canada et les États-Unis (à l'exclusion des traversiers) arrivés et partis.

—	Canadian—Canadiens			United States—États-Unis			Total		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Arrived—Arrivé	10,276	8,791,608	277,475	24,797	7,954,024	182,089	35,073	16,745,632	459,564
Departed—Partis	11,505	10,641,079	284,284	24,413	8,202,452	198,515	35,918	18,843,531	482,799
Total	21,781	19,432,687	561,759	49,210	16,156,476	380,604	70,991	35,589,163	942,363

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No. 19.—STATEMENT of Vessels, British and Foreign, entered and cleared Coastwise from the undermentioned Ports and Outports

N° 19.—ÉTAT des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers aux ports ou ports secondaires ci-après mentionnés

STEAMERS AND MOTOR BOATS—VAPEURS

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Albert, N.B.	23	786	57				26	902	63			
Alert Bay, B.C.	1,285	718,642	14,207				1,288	723,016	14,280			
Amherst, N.S.	3	138	18				3	138	18			
Amherstburg, Ont.	31	11,220	510				29	8,651	454			
Amherst Harbour, Que.	131	50,595	2,645				132	50,863	2,649			
Annapolis Royal, N.S.	129	10,882	797				127	10,401	795	2	996	32
Antigonish, N.S.	45	3,182	288	1	1,268	18	45	3,182	288			
Anyox, B.C.	473	267,127	10,251				402	187,031	7,855			
Arichat, N.S.	1,098	76,350	7,888				1,100	76,076	7,937			
Aultsville, Ont.	58	13,224	1,044				58	13,224	1,044			
Baddeck, N.S.	660	81,572	5,362	36	41,263	739	648	71,958	5,123	48	52,638	968
Bamfield, B.C.	109	18,043	1,033				113	18,281	1,064			
Barrington Passage, N.S.	763	30,016	5,375	8	357	79	772	27,954	5,241	8	223	61
Bath, Ont.	134	12,308	1,284				134	12,308	1,284			
Bathurst, N.B.				2	3,198	50				3	4,138	69
Bear River, N.S.	94	45,885	953				76	39,813	713			
Belliveau's Cove, N.S.	6	327	34				6	327	34			
Belleville, Ont.	97	41,987	2,523	2	31	6	87	41,710	2,491	1	28	4
Blind River, Ont.	111	35,605	2,250				108	34,466	2,215			
Bonne Espérance, Que.	12	5,752	377				11	5,742	374			
Bridgeburg, Ont.	8	114	29				5	111	24			
Bridgetown, N.S.	39	2,188	226				39	2,188	226			
Bridgewater, N.S.	153	3,670	446	9	9,169	190	153	3,680	444			
Brighton, Ont.	21	24,012	1,203				21	24,012	1,203			
Britannia Beach, B.C.	550	141,640	9,414				550	141,640	9,414			
Brockville, Ont.	192	198,923	11,576				184	194,643	11,316			
Bruce Mines, Ont.	132	24,422	3,890				129	24,566	1,616			
Buctouche, N.B.	4	25	19	2	1,396	36	3	18	14			
Butedale, B.C.	1,009	246,979	15,631				1,015	247,660	15,721			
Byng Inlet, Ont.	6	609	47				26	42,987	463			
Campbellton, N.B.	48	13,083	437	13	15,319	289	44	7,369	331	2	3,439	52
Campobello, N.B.	197	27,854	1,943	1	1	1	206	28,322	1,982			
Canning, N.S.	17	2,142	153				17	2,142	153			
Canso, N.S.	1,530	203,716	16,124	3	1,801	47	1,538	206,287	16,433	1	11	6
Caraquet, N.B.	5	730	52				5	730	52			

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Continued*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Suite*

STEAMERS AND MOTOR BOATS—*Con.*—VAPEURS—*Suite*

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Carcross, Y.T.	89	66,394	2,613				89	66,394	2,619			
Cardinal, Ont.	9	4,440	116				9	4,440	116			
Chandler, Que.	20	13,403	426	23	23,353	496	20	13,403	426	23	23,353	495
Charlottetown, P.E.I.	576	166,828	7,376				546	143,639	6,862			
Chatham, N.B.	44	38,111	567	9	8,540	185	45	41,407	600	1	1,314	24
Chatham, Ont.	25	1,491	180				23	1,888	226			
Chemainus, B.C.	303	18,697	2,197				288	12,824	2,036			
Chester., N.S.	108	2,140	316	4	60	12	109	2,193	305	4	60	12
Cheticamp, N.S.	131	11,138	1,323	14	13,079	261	131	11,138	1,323	14	13,079	261
Chicoutimi, Que.	119	63,965	4,217	4	5,358	99	129	77,528	4,481	6	7,602	139
Chippawa, Ont.	7	68	16	2	8	4	26	144	54	7	29	14
Clark's Harbour, N.S.	556	21,345	3,647	37	1,054	116	565	22,347	3,513	34	541	108
Clementsport, N.S.	16	971	96				16	971	96			
Cobourg, Ont.	13	16,720	273				11	10,427	213			
Cockburn Island, Ont.	118	35,186	2,170				115	34,556	2,138			
Collingwood, Ont.	58	52,941	1,143	3	9,875	82	54	37,600	1,065	3	8,113	80
Cornwall, Ont.	126	87,262	2,340				73	26,168	1,402			
Courtright, Ont.	78	53,700	1,031				78	56,060	1,083			
Cutler, Ont.	187	27,664	1,312				186	27,088	1,302			
Dalhousie, N.B.	5	142	21				5	156	19			
Dawson, Y.T.	48	29,193	1,179	1	603	29	45	29,188	1,181	1	603	29
Depot Harbour, Ont.	14	36,118	346				6	24,613	162			
Deseronto, Ont.	10	1,074	100				10	1,074	100			
Digby, N.S.	996	247,300	15,418	4	42	10	992	247,662	15,464	1	16	3
Dunnville, Ont.	5	184	30				4	138	25			
Erieau, Ont.	18	4,496	173				20	3,770	156			
Fort William, Ont.	771	1,897,659	26,985				791	1,888,180	29,803			
Forty Mile, Y.T.				1	603	29				1	603	29
Freeport, N.S.	364	33,430	2,863	5	71	12	361	34,286	2,843	7	106	19
Gananoque, Ont.	80	16,029	1,332				80	16,029	1,332			
Gaspe, Que.	122	132,573	3,325				120	129,773	3,303			
Georgetown, P.E.I.	13	3,643	96				10	2,143	69			
Glace Bay, N.S.	2	41	13				2	41	13			
Goderich, Ont.	90	175,400	1,835	7	27,420	208	45	85,183	853	1	97	6
Gore Bay, Ont.	444	108,584	6,178				446	107,879	6,236			
Grand Narrows, N.S.	68	5,004	425				70	5,236	445			
Guysboro, N.S.	358	34,393	2,976	9	9,024	183	354	30,345	2,885	1	1,472	22
Halifax, N.S.	1,848	444,318	15,823	64	51,582	1,809	2,095	424,336	16,901	56	64,300	2,519
Hamilton, Ont.	610	392,226	12,512	1	29	4	463	236,900	9,514	5	3,894	89
Hantsport, N.S.	20	447	108				21	1,332	121			

Havre St. Pierre, Que.	59	25,141	1,656				59	25,141	1,654			
Hull, Que.	32	1,170	303				33	1,362	314			
Inverness, N.S.	1	79	12				1	79	12			
Iona, N.S.	250	24,250	485				250	24,250	485			
Iroquois, Ont.	62	14,136	1,116				62	14,136	1,116			
Isaac's Harobur, N.S.	127	28,769	1,743	10	150	29	127	28,769	1,740	1	16	3
Kaslo, B.C.	469	315,410	9,706				468	314,809	9,696			
Kenora, Ont.	13	237	39				16	495	73			
Kentville, N.S.	88	10,307	611				88	10,307	611			
Key Harbour, Ont.							1	2,450	23			
Kincardine, Ont.							1	1,327	26			
Kingsport, N.S.	2	202	14				2	202	14			
Kingston, Ont.	443	339,256	9,300				425	292,394	8,548			
Kingsville, Ont.	232	53,759	2,617				230	52,641	2,680			
Ladner, B.C.	121	6,982	675				128	6,002	689			
Ladysmith, B.C.	1,450	211,005	16,948				1,468	235,656	16,972			
La Have, N.S.	206	13,394	1,106	1	6	3	205	13,062	1,094			
Leamington, Ont.	394	86,286	4,334				394	85,977	4,333			
Levis, Que.	65	163,617	2,199				68	168,585	2,270	2	5,347	70
Little Current, Ont.	251	81,885	5,053				265	109,336	5,336			
Liverpool, N.S.	80	3,641	324	5	2,811	65	73	3,420	329	2	20	6
Lockeport, N.S.	1	40	3				3	108	6			
Lord's Cove, N.B.	115	4,941	552	1	7	2	131	5,407	593	2	28	4
Louisburg, N.S.	84	75,979	1,403				89	69,769	1,403	10	14,276	229
Lower East Pubnico, N.S.	62	1,826	560				65	2,004	444			
Lunenburg, N.S.	318	15,870	1,265	2	613	21	320	16,683	1,285	3	86	11
Mabou, N.S.	30	7,607	282				30	7,607	282	1	905	21
Mahone Bay, N.S.	44	1,586	136				41	1,546	129			
Maitland, N.S.	18	2,180	155				21	2,294	161			
Margaree, N.S.	136	11,653	1,411				136	11,653	1,411			
Margaretsville, N.S.	60	6,984	417				62	7,134	427			
Meaford, Ont.	48	12,825	679				45	12,744	664			
Midland, Ont.	143	204,474	2,961	4	25,631	135	159	201,558	3,318			
Moncton, N.B.	107	5,050	256				104	3,531	230			
Montague, P.E.I.	1	32	2				1	32	2			
Montreal, Que.	4,973	4,071,048	113,867	34	90,684	1,029	4,468	3,367,280	103,400	185	93,736	1,776
Morrisburg, Ont.	69	15,523	1,310				69	14,110	1,227			
Murray Harbour, P.E.I.	3	60	10				3	60	10			
Nanaimo, B.C.	3,122	924,099	56,618				3,084	926,773	56,656			
Napanee, Ont.	1	87	10				1	87	10			
Nelson, B.C.	1,574	674,769	27,365				1,569	665,599	27,377			
New Campbellton, N.S.	81	12,350	729				81	12,350	729			
Newcastle, N.B.				3	3,012	64	2	6,570	83			
New Westminster, B.C.	1,349	319,358	11,509				1,440	303,346	16,051			
Niagara, Ont.	925	831,917	64,173				1,115	982,369	75,194			
Niagara Falls, Ont.	423	385,813	29,381				259	243,195	18,757			
North East Harbour, N.S.	91	3,514	712				91	3,514	712			
North Head, N.B.	128	5,935	492				147	6,242	528	1	8	2
North Sydney, N.S.	385	279,821	6,199	25	17,999	622	400	247,179	5,705	30	17,687	76
Ocean Falls, B.C.	1,020	535,873	25,818				961	431,886	23,695			
Ottawa, Ont.	95	11,682	1,320				92	11,430	1,288			
Owen Sound, Ont.	340	222,796	6,055				333	203,560	5,382			
Parrsboro, N.S.	487	45,783	3,088	1	900	21	479	41,172	2,936	2	564	23
Parry Sound, Ont.	75	28,299	1,512				75	29,581	1,513			
Paspebiac, Que.	121	12,337	835	4	7,384	92	121	12,262	973			
Penetanguishene, Ont.							2	142	11			
Percé, Qué.	6	2,306	51	1	1,141	23	6	2,306	51	1	1,141	23
Picton, Ont.	206	30,467	2,315				209	30,968	2,357			
Pictou, N.S.	380	154,971	6,640	7	7,149	146	381	154,811	6,631	4	1,188	79
Pointe au Pic, Que.				2	1,471	35						

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Continued*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Suite*

STEAMERS AND MOTOR BOATS—*Con.*—VAPEURS—*Suite*

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Point Edward, Ont.	238	400,197	10,812				250	423,905	10,869			
Port Alberni, B.C.	375	92,917	5,111				379	91,310	5,073			
Port Alfred, Que.	111	236,633	8,876	14	15,112	296	109	199,325	8,785	12	27,115	325
Port Arthur, Ont.	691	1,657,867	31,676				741	1,712,743	33,036			
Port Burwell, Ont.	20	540	101				20	505	96	1	3	2
Port Clyde, N.S.	96	3,676	761				96	3,676	761			
Port Colborne, Ont.	1,537	2,202,846	30,723				1,393	1,505,684	26,524			
Port Dalhousie, Ont.	603	331,665	11,719				549	307,509	11,307			
Port Dover, Ont.	27	663	139	2	15	6	29	847	155	3	23	8
Port Elgin, N.B.	14	274	34				14	313	33	1	24	2
Port George, N.S.	52	6,136	364				52	6,136	364	1	498	16
Port Hastings, N.S.	36	3,512	279				36	3,572	274			
Port Hawkesbury, N.S.	231	27,360	1,783				229	25,157	1,769			
Port Hood, N.S.	293	25,518	3,116				293	25,518	3,116			
Port Hope, Ont.	7	2,186	65				4	1,252	39			
Port La Tour, N.S.	105	5,066	810				105	5,066	810			
Port Maitland, Ont.	61	1,772	304	6	6	13	52	2,774	292	6	6	12
Port McNicoll, Ont.	192	465,488	8,883				188	428,725	8,774			
Port Menier, Que.	135	81,291	2,930				135	81,291	2,922			
Port Morien, N.S.	13	1,846	104				13	1,846	104			
Port Mulgrave, N.S.	1,170	94,228	10,154	1	597	16	1,171	94,348	10,143			
Port Stanley, Ont.	41	1,208	250				89	47,348	930			
Port Williams, N.S.	18	2,292	133	2	1,651	49	17	2,006	119			
Powell River, B.C.	1,865	901,207	50,102				1,785	806,420	49,801			
Prescott, Ont.	364	357,916	18,924				386	392,029	20,860			
Prince Rupert, B.C.	2,196	833,708	216,923				2,285	795,056	181,596			
Pugwash, N.S.	1	751	18	2	1,969	41						
Quatsino, B.C.	163	73,841	3,104	3	11,195	110	173	80,278	3,403	8	26,426	311
Quebec, Que.	1,665	1,706,406	62,536	44	119,462	1,546	1,829	2,718,220	94,701	49	116,427	2,459
Rainy River, Ont.	15	463	68				17	291	45			
Richibucto, N.B.	4	133	10	1	1,431	24	3	85	8			
River John, N.S.	15	266	35				14	234	35			
Rivière du Loup, Que.	134	19,336	1,779				135	19,481	1,796			
Riverport, N.S.	165	7,015	639				189	7,476	690			
Rockport, Ont.	50	11,400	1,050				50	11,400	1,050			
Sackville, N.B.	2	70	4				2	70	4			
Salmon River, N.S.	1	32	4				1	32	4			
Sandy Cove, N.S.	92	4,782	483				92	4,782	487			
Sandy Point, N.S.	75	3,475	463	2	116	28	74	3,690	433	3	174	45
Sandwich, Ont.	15	2,362	147				17	2,783	189			

Sarnia, Ont.	292	190,718	4,201	4	12,563	108	321	162,854	3,859			
Sault Ste. Marie, Ont.	2,002	1,401,407	48,741				2,033	1,591,131	48,814			
Shediac, N.B.	15	274	35				17	318	40			
Sheet Harbour, N.S.	191	30,783	2,021	12	10,930	255	280	34,602	2,398			
Shelburne, N.S.	95	5,322	417	2	115	23	101	2,876	511	3	627	38
Sherbrooke, N.S.	54	6,014	500	8	8,611	176	52	5,066	468			
Shippegan, N.B.	229	5,651	789	1	905	20	231	5,674	790	1	314	7
Sidney, B.C.	255	22,785	1,964	4	3,564	110	273	26,425	2,096	1	700	27
Smith's Falls, Ont.	28	4,396	392				28	4,396	392			
Sorel, Que.	729	943,917	41,005				721	945,523	40,652			
Souris, P.E.I.	107	45,540	2,413				110	46,711	2,410			
Southampton, Ont.	7	267	25				8	299	29			
Steveston, B.C.	515	25,519	2,096				559	20,276	2,318			
Stewart, B.C.	182	165,558	5,253				229	211,674	8,362			
Stickeen, B.C.	6	39	7	36	1,240	198	7	40	13	36	1,256	184
St. Andrews, N.B.	639	30,177	2,570	3	17	5	650	28,962	2,595			
St. George, N.B.	43	2,687	306				43	2,687	306			
St. John, N.B.	1,778	369,260	19,617	17	9,393	212	1,892	576,789	23,820	60	62,163	1,267
St. Peter's, N.S.	228	17,538	1,687	9	8,269	184	228	17,618	1,688	1	739	21
St. Stephen, N.B.	169	10,247	822				172	10,097	856	1	21	2
Summerside, P.E.I.	9	213	72	1	2,619	33	9	213	72	6	5,879	116
Sydney, N.S.	776	1,183,005	18,604	119	219,062	3,443	778	1,142,625	18,296	49	55,773	1,265
Thessalon, Ont.	266	74,783	4,670				263	71,936	4,649			
Thorold, Ont.	93	102,332	1,869				12	12,825	240			
Three Rivers, Que.	1,432	1,315,765	36,422				1,420	1,312,041	36,136			
Toronto, Ont.	1,302	941,601	30,875				967	596,729	22,466			
Trenton, Ont.	37	3,954	344				34	3,478	315			
Trois Pistoles, Que.	1	22	3				1	22	3			
Truro, N.S.	17	2,369	154				17	2,369	154			
Union Bay, B.C.	753	195,185	12,045				753	193,777	12,016			
Vancouver, B.C.	12,731	4,011,261	238,344				12,902	4,182,168	241,408			
Victoria, B.C.	4,380	2,811,410	122,119	39	106,303	1,414	4,484	2,936,601	129,219	90	188,106	3,095
Victoria, P.E.I.	60	13,020	540				60	13,020	540			
Walkerville, Ont.	105	42,042	1,283				115	55,949	1,766			
Wallace, N.S.	19	420	40				18	400	38			
Wallaceburg, Ont.	166	43,442	1,206				144	37,236	1,035			
Welland, Ont.	67	65,479	1,233				18	16,938	296			
West Dock, Ont.	219	47,968	2,509				219	47,968	2,509			
Westport, N.S.	350	32,517	2,838				364	32,373	2,670	2	10	4
Weymouth, N.S.	51	3,585	313	3	2,065	41	52	3,938	326	1	5	2
Whitby, Ont.	1	4	2							2	10	6
White Horse, Y.T.	122	41,834	1,780	1	603	25	122	41,834	1,781	1	603	25
White Rock, B.C.	75	1,936	302				88	2,283	358			
Wiarton, Ont.	11	901	67				13	1,275	81			
Windsor, N.S.	123	54,060	1,393	6	3,416	83	132	53,644	1,353	5	4,344	112
Windsor, Ont.	219	174,299	5,169				186	164,207	4,555			
Winnipeg, Man.	10	1,167	106				8	748	75			
Wolfville, N.S.	19	2,378	167				19	2,378	167			
Yarmouth, N.S.	496	31,608	2,932				515	32,616	3,190	25	412	78
York Factory, Man.	1	64	10				1	64	10			
Total	83,371	40,893,914	1,777,703	707	924,691	15,740	83,197	40,008,995	1,763,783	842	813,315	16,793

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Continued*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Suite*

SAILING VESSELS—VOILIERS

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Albert, N.B.	10	1,533	36				5	619	15			
Alberton, P.E.I.	15	705	48				14	650	44			
Alert Bay, B.C.	3	4,110	18				2	3,005	12			
Amherst, N.S.	30	1,585	28				30	1,585	28			
Amherst Harbour, Que.	23	1,240	83				26	1,449	100			
Annapolis Royal, N.S.	68	1,834	157				67	1,464	146			
Antigonish, N.S.	67	2,383	146				67	2,383	146	1	1,906	9
Anyox, B.C.	41	32,981	77				32	4,862	18			
Arichat, N.S.	163	5,527	423				159	5,584	413			
Baddeck, N.S.	146	5,649	396	10	210	42	157	5,986	441	11	253	46
Bath, Ont.	1	22	2				4	88	8			
Bathurst, N.B.	311	10,017	1,139				313	9,542	1,127			
Belliveau's Cove, N.S.	90	3,570	234	2	222	6	85	2,751	185	1	203	4
Belleville, Ont.	5	2,243	40				11	5,602	65			
Bridgewater, N.S.	17	6,819	85	2	1,361	15	7	1,985	34			
Britannia Beach, B.C.	32	22,114	160				32	22,114	160			
Buctouche, N.B.	8	529	29				8	529	29			
Campbellton, N.B.	28	1,462	82				27	683	74			
Canning, N.S.	6	591	20				7	649	23			
Canso, N.S.	433	22,306	1,605				436	22,110	1,634			
Caraquet, N.B.	70	2,446	228				71	2,534	231			
Cardigan, P.E.I.	19	641	42				20	694	45			
Charlottetown, P.E.I.	322	17,259	813				327	20,747	859			
Chatham, N.B.	91	6,464	388	1	627	6	89	4,309	322	1	286	7
Chatham, Ont.	20	5,700	140				15	4,275	105			
Chemainus, B.C.	84	52,875	317				84	52,849	317			
Chester, N.S.	1	119	6				1	119	6			
Cheticamp, N.S.	13	573	42				16	649	50			
Church Point, N.S.	12	921	44				10	593	35			
Clementsport, N.S.	8	120	16				8	120	16			
Courtright, Ont.	9	4,134	86				9	4,134	86			
Dalhousie, N.B.	4	142	10				5	171	12			
Dawson, Y.T.	15	3,017	15	2	774	2	16	3,230	16			
Dorchester, N.B.	6	224	17				6	224	17			
Fort William, Ont.	1	2,819	11				1	2,819	11			
Freeport, N.S.							1	393	5			
Gaspé, Que.	29	3,337	132				25	1,473	94			
Georgetown, P.E.I.	115	5,134	264				115	5,120	257			
Glace Bay, N.S.	30	1,183	91				28	1,076	85			
Grand Narrows, N.S.	5	235	14				5	235	14			

Great Village, N.S.	22	640	46				22	640	46			
Guysboro, N.S.	31	3,247	79				31	3,250	78			
Halifax, N.S.	374	25,203	1,460	7	4,045	47	193	23,271	855	1	726	7
Hamilton, Ont.	2	1,297	14									
Hantsport, N.S.	8	809	18				7	493	14	1	111	4
Hillsboro, N.B.	2	70	4	1	190	5	1	31	2	1	307	5
Hull, Que.	121	21,452	242				126	22,213	242			
Iona, N.S.	16	640	48				16	640	48			
Isaac's Harbour, N.S.	18	1,048	61				15	774	49			
Joggin Mines, N.S.	22	873	52	1	160	4	22	873	52			
Kentville, N.S.	33	833	71				33	833	71			
Kingsport, N.S.	4	138	9				8	823	23			
Kingston, Ont.	16	9,871	98				22	15,129	143			
Ladysmith, B.C.	611	612,514	3,518				599	610,377	3,546			
La Have, N.S.	46	6,737	203				67	11,903	343			
Liverpool, N.S.	5	1,816	29				5	1,131	31			
Lockeport, N.S.	23	1,178	76	8	137	27	25	946	69	2	31	6
Louisbourg, N.S.	30	1,927	133	9	13,067	217	36	2,310	188	1	20	8
Lunenburg, N.S.	81	10,655	464	1	176	8	81	12,073	356	1	113	5
Mabou, N.S.	8	398	21				8	398	21			
Mahone Bay, N.S.	6	693	27				7	771	34			
Maitland, N.S.	11	2,730	43				3	780	12			
Margaree, N.S.	4	40	20				4	40	20			
Margaretville, N.S.	1	237	5									
Meteghan River, N.S.	44	2,579	110				44	2,698	112	1	204	6
Midland, Ont.	1	2,998	13				2	5,817	24			
Moncton, N.B.	3	1,055	13				3	916	15	1	352	5
Montague, P.E.I.	67	2,963	153				64	2,685	139			
Montmagny, Que.	4	841	9				5	1,091	11			
Montreal, Que.	453	186,516	1,752	23	2,704	46	481	191,405	1,720	24	2,741	52
Morrisburg, Ont.	3	1,110	19				1	360	9			
Murray Harbour, P.E.I.	103	3,355	204				99	3,149	206			
Nanaimo, B.C.	18	13,433	77				24	17,720	96			
Nelson, B.C.	1,027	573,482	2,054				831	299,772	1,662			
New Campbellton, N.S.	5	171	14				5	171	14			
Newcastle, N.B.	40	1,656	120	1	627	6	40	1,211	116			
New Glasgow, N.S.	38	847	78				36	807	73			
New Westminster, B.C.	165	121,133	7,688				172	120,185	664			
North Sydney, N.S.	654	37,832	2,739				615	32,458	2,521	1	217	8
Owen Sound, Ont.	6	3,984	42				6	3,984	42			
Parrsboro, N.S.	159	23,883	559				146	16,857	464	3	732	12
Paspebiac, Que.	5	263	16				5	263	16			
Pictou, N.S.	220	12,080	580	1	286	7	223	12,858	591			
Point Edward, Ont.	86	68,438	1,274				87	68,723	1,281			
Port Alfred, Que.	5	221	25				7	321	35			
Port Arthur, Ont.							2	5,365	21			
Port Clyde, N.S.	1	238	6									
Port Colborne, Ont.	69	53,912	425				91	60,625	652			
Port Dalhousie, Ont.	8	4,413	52				7	3,540	61			
Port Elgin, N.B.	11	485	30				11	485	30			
Port Hastings, N.S.	65	2,200	154				65	2,200	154			
Port Hawkesbury, N.S.	105	7,377	313				120	7,824	371			
Port Hood, N.S.	1	90	5				1	90	5			
Port Hope, Ont.	1	198	5									
Port Menier, Que.	1	77	5				1	77	5			
Port Mulgrave, N.S.	19	4,675	64				16	764	39	1	1,387	10
Port Wade, N.S.	21	816	54				18	739	47			
Port Williams, N.S.	26	652	54				26	572	55			
Powell River, B.C.	9	9,206	45				7	7,120	35			
Prescott, Ont.							1	335	3			

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise—*Concluded*

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers—*Fin*

SAILING VESSELS—*Concluded*—VOILIERS—*Fin*

Ports and Outports — Ports et ports secondaires	Vessels Arrived—Arrivés						Vessels Departed—Partis					
	British—Britanniques			Foreign—Étrangers			British—Britanniques			Foreign—Étrangers		
	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage	Vessels — Navires	Tons register — Tonnage enregistré	Crew — Équipage
Prince Rupert, B.C.	24	41,232	83				22	37,796	81			
Pugwash, N.S.	21	1,982	61				17	545	37			
Quebec, Que.	234	15,226	787	16	1,659	32	262	17,410	855	73	8,351	146
Richibucto, N.B.	40	2,180	151	4	2,126	32	40	2,122	147			
River John, N.S.	7	147	15				7	147	14			
Riverport, N.S.	25	3,426	128				40	5,093	217			
Salmon River, N.S.	30	976	69				32	1,234	78			
Sandy Point, N.S.	6	2,311	39	3	2,984	24	8	2,931	51			
Sandwich, Ont.	1	98	1				3	1,402	24			
Sarnia, Ont.	108	55,653	1,114				136	63,664	1,315			
Sheet Harbour, N.S.	111	7,339	399				25	3,913	113			
Shelburne, N.S.	5	1,405	29				2	443	11			
Sherbrooke, N.S.	27	2,819	94				27	2,309	93			
Shippegan, N.B.	22	866	73				21	778	70			
Sidney, B.C.	1	672	4				1	672	4			
Sorel, Que.	21	14,731	110				25	18,629	140			
Souris, P.E.I.	37	1,601	98				39	1,933	116			
St. John, N.B.	30	3,895	139				58	19,656	307	10	3,693	41
St. John's Que.	2	30	4				3	52	6			
St. Peters, N.S.	56	2,560	160				52	2,386	153			
St. Stephen, N.B.							3	1,135	18	1	475	7
Summerside, P.E.I.	88	5,214	329				88	5,298	333			
Sydney, N.S.	365	19,778	1,187	4	279	21	375	21,235	1,248	2	241	11
Tatamagouche, N.S.	2	42	5				2	42	5			
Three Rivers, Que.	316	81,869	749				318	84,005	763			
Tignish, P.E.I.	8	468	92				7	440	92			
Toronto, Ont.	9	3,668	41				9	4,584	56			
Trenton, Ont.	10	3,994	49				6	2,436	40			
Trois Pistoles, Que.	2	118	8				2	118	8			
Truro, N.S.	15	1,595	44	1	475	7	11	924	27			
Union Bay, B.C.	26	37,943	136				25	37,923	133			
Vancouver, B.C.	1,284	990,642	13,805				1,372	1,006,287	15,389			
Victoria, B.C.	37	21,900	107				40	21,843	102			
Victoria, P.E.I.	23	1,778	67				24	1,846	70			
Walkerville, Ont.	73	23,771	1,015				74	56,922	1,076			
Wallaceburg, Ont.	43	12,269	295				26	7,404	181			
Welland, Ont.	1	352	10				1	352	10			
Westport, N.S.							2	541	12			
Weymouth, N.S.	185	9,827	501	8	515	27	180	9,024	486	7	461	23
White Horse, Y.T.	17	3,288	17				15	2,933	15			

Wiarton, Ont.	2	704	10				4	1,408	21			
Windsor, N.S.	111	10,783	457				93	5,909	215			
Windsor, Ont.	73	57,415	1,068				73	56,889	1,037			
Wolfville, N.S.	9	367	22				15	1,494	52			
Yarmouth, N.S.	2	635	14				11	4,313	80			
Total	10,798	3,530,357	56,562	105	32,624	581	10,530	3,300,910	50,118	145	22,810	422

No. 19.—Statement of Vessels, British and Foreign, entered and cleared Coastwise

N° 19.—État des navires britanniques et étrangers déclarés à l'entrée et à la sortie comme cabotiers

RECAPITULATION—RÉCAPITULATION

—	Steamers — Vapeurs			Sailing Vessels — Voiliers			Total		
	Vessels — Navires	Tonnage — Tonnage	Crew — Équipage	Vessels — Vessels	Tonnage — Tonnage	Crew — Équipage	Vessels — Vessels	Tonnage — Tonnage	Crew — Équipage
Arrived—Arrivés—									
British—Britanniques	83,371	40,893,914	1,777,703	10,798	3,530,357	56,562	94,169	44,424,271	1,834,265
Foreign—Étrangers...	707	924,691	15,740	105	32,624	581	812	957,315	16,321
Total.....	84,078	41,818,605	1,793,443	10,903	3,562,981	57,143	94,981	45,381,586	1,850,586
Departed—Partis—									
British—Britanniques	83,197	40,008,995	1,763,783	10,530	3,300,910	50,118	93,727	43,309,905	1,813,901
Foreign—Étrangers...	842	813,315	16,793	145	22,810	422	987	836,125	17,215
Total.....	84,039	40,822,310	1,780,576	10,675	3,323,720	50,540	94,714	44,146,030	1,831,116

DESCRIPTION OF VESSELS—DESCRIPTION DES NAVIRES

—	Arrived—Arrivés		Departed—Partis		Total	
	Vessels — Navires	Tonnage — Tonnage	Vessels — Navires	Tonnage — Tonnage	Vessels — Navires	Tonnage — Tonnage
Steamers and motors—Vapeurs—						
Screw—Hélice.....	72,904	37,750,723	72,754	36,811,066	145,658	74,561,789
Paddle—Aubes.....	2,994	2,654,962	2,982	2,644,733	5,976	5,299,695
Sternwheel—Roue à l'arrière.....	1,557	1,065,460	1,551	1,016,551	3,108	2,082,011
Motor—Moteur.....	6,623	347,460	6,752	349,960	13,375	697,420
Total.....	84,078	41,818,605	84,039	40,822,310	168,117	82,640,915
Sailing Vessels—Voiliers—						
Sailing—A voile.....	5,938	385,469	5,703	362,274	11,641	747,743
Barges—Barges.....	4,965	3,177,512	4,972	2,961,446	9,937	6,138,958
Total.....	10,903	3,562,981	10,675	3,323,720	21,578	6,886,701
Grand total.....	94,981	45,381,586	94,714	44,146,030	189,695	89,527,616

RECAPITULATION—RÉCAPITULATION

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed by Provinces, Ports and Outports

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires

NOVA SCOTIA—NOUVELLE-ECOSSE

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Amherst	2	196	2	196	33	1,723	33	1,723	.....	.....	.....	.....	35	1,919	35	1,919
Joggin Mines	23	1,033	23	1,033	23	1,033	22	873	.....	.....	.....	.....	46	2,066	45	1,906
Pugwash	4	3,587	11	7,738	24	4,702	17	545	.....	.....	.....	.....	28	8,289	28	8,283
Wallace	1	1,109	1	1,109	19	420	18	400	.....	.....	.....	.....	20	1,529	19	1,509
Annapolis Royal	21	9,368	22	9,349	197	12,716	196	12,861	.....	.....	.....	.....	218	22,084	218	22,210
Bridgetown	.....	.....	.....	.....	39	2,188	39	2,188	.....	.....	.....	.....	39	2,188	39	2,188
Clementsport	6	644	6	363	24	1,091	24	1,091	.....	.....	.....	.....	30	1,735	30	1,454
Port Wade	5	381	6	644	21	816	18	739	.....	.....	.....	.....	26	1,197	24	1,383
Antigonish	.....	.....	.....	.....	113	6,833	113	7,471	.....	.....	.....	.....	113	6,833	113	7,471
Arichat	29	444	34	548	1,261	81,877	1,259	81,660	.....	.....	.....	.....	1,290	82,321	1,293	82,208
St. Peters	5	4,576	13	12,106	293	28,367	281	20,743	.....	.....	.....	.....	298	32,943	294	32,849
Baddeck	46	24,452	59	56,772	852	128,694	864	130,835	.....	.....	.....	.....	898	153,146	923	187,607
Iona	.....	.....	.....	.....	266	24,890	266	24,890	.....	.....	.....	.....	266	24,890	266	24,890
New Campbellton	.....	.....	.....	.....	86	12,521	86	12,521	.....	.....	.....	.....	86	12,521	86	12,521
Barrington Passage	9	367	9	297	771	30,373	780	28,177	.....	.....	.....	.....	780	30,740	789	28,474
Clark's Harbour	37	1,067	11	109	593	22,399	599	22,888	.....	.....	.....	.....	630	23,466	610	22,997
Port La Tour	.....	.....	.....	.....	105	5,066	105	5,066	.....	.....	.....	.....	106	5,066	105	5,066

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

NOVA SCOTIA-Continued—**NOUVELLE-ECOSSE**-Suite

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Bridgewater	28	22,460	49	36,924	181	21,019	160	5,665	.....	.....	.....	.....	209	43,479	209	42,589
Canso	215	29,767	211	30,154	1,966	227,823	1,975	228,408	.....	.....	.....	.....	2,181	257,590	2,186	258,562
Guysboro	3	3,353	15	14,627	398	46,664	386	35,067	.....	.....	.....	.....	401	50,017	401	49,694
Isaac's Harbour	26	564	36	817	155	29,967	143	29,559	.....	.....	.....	.....	181	30,531	179	30,376
Port Mulgrave	2	1,839	3	2,955	1,190	99,500	1,188	96,499	.....	.....	.....	.....	1,192	101,339	1,191	99,454
Sherbrooke	16	14,307	27	24,423	89	17,444	79	7,375	.....	.....	.....	.....	105	31,751	106	31,798
Digby	23	4,414	32	4,638	1,000	247,342	993	247,678	.....	.....	.....	.....	1,023	251,756	1,025	252,316
Bear River	8	10,412	10	10,796	94	45,885	76	39,813	.....	.....	.....	.....	102	56,297	86	50,609
Freeport	24	922	20	486	369	33,501	369	34,785	.....	.....	.....	.....	393	34,423	389	35,271
Sandy Cove	.....	.....	.....	.....	92	4,782	92	4,782	.....	.....	.....	.....	92	4,782	92	4,782
Westport	32	1,157	19	351	350	32,517	368	32,924	.....	.....	.....	.....	382	33,674	387	33,275
Glace Bay	32	1,224	30	1,117	32	1,224	30	1,117	.....	.....	.....	.....	64	2,448	60	2,234
Halifax	1,427	3,537,068	1,584	3,611,778	2,293	525,148	2,345	512,633	.....	.....	.....	.....	3,720	4,062,216	3,929	4,124,411
Sheet Harbour	9	8,323	20	18,142	314	49,052	305	38,515	.....	.....	.....	.....	323	57,375	325	56,657
Kentville	1	80	1	80	121	11,140	121	11,140	.....	.....	.....	.....	122	11,220	122	11,220
Canning	1	58	.....	.....	23	2,733	24	2,791	.....	.....	.....	.....	24	2,791	24	2,791
Kingsport	2	710	.....	.....	6	340	10	1,025	.....	.....	.....	.....	8	1,050	10	1,025
Port Williams	1	932	4	2,869	46	4,595	43	2,578	.....	.....	.....	.....	47	5,527	47	5,447
Wolfville	6	1,127	.....	.....	28	2,745	34	3,872	.....	.....	.....	.....	34	3,872	34	3,872
Liverpool	92	6,695	105	11,154	90	8,268	80	4,571	.....	.....	.....	.....	182	14,963	185	15,725

Lockeport	20	832	23	860	32	1,355	30	1,085					52	2,187	53	1,945
Lunenburg	264	28,334	301	27,862	402	27,314	405	28,955					666	55,648	706	56,817
Chester	26	353	25	348	113	2,319	114	2,372					139	2,672	139	2,720
La Have	68	10,749	39	4,086	253	20,137	272	24,965					321	30,886	311	29,051
Mahone Bay	6	607	5	520	50	2,279	48	2,317					56	2,886	53	2,837
Riverport	38	4,223	30	3,020	190	10,441	229	12,569					228	14,664	259	15,589
Middleton																
Margaretsville	2	567	3	804	61	7,221	62	7,134					63	7,788	65	7,938
Port George	1	498			52	6,136	53	6,634					53	6,634	53	6,634
New Glasgow					38	847	36	807					38	847	36	807
North Sydney	868	352,869	892	395,340	1,064	335,652	1,046	297,541					1,932	688,521	1,938	692,881
Grand Narrows					73	5,239	75	5,471					73	5,239	75	5,471
Parrsboro	68	25,077	93	37,607	647	70,566	630	59,325					715	95,643	723	96,932
Pictou	10	6,261	14	12,671	608	174,486	608	168,857					618	180,747	622	181,528
River John					22	413	21	381					22	413	21	381
Tatamagouche					2	42	2	42					2	42	2	42
Port Hawkesbury	62	10,417	54	15,570	336	34,737	349	32,981					398	45,154	403	48,551
Port Hastings	1	203	1	203	101	5,712	101	5,772					102	5,915	102	5,975
Port Hood					294	25,608	294	25,608					294	25,608	294	25,608
Cheticamp	14	13,079	14	13,079	158	24,790	161	24,866					172	37,869	175	37,945
Inverness					1	79	1	79					1	79	1	79
Mabou			1	905	38	8,005	39	8,910					38	8,005	40	9,815
Margaree					140	11,693	140	11,693					140	11,693	140	11,693
Shelburne	77	5,737	87	7,382	102	6,842	106	3,946					179	12,579	193	11,328
North East Harbour			1	12	91	3,514	91	3,514					91	3,514	92	3,526
Port Clyde			2	1,698	97	3,914	96	3,676					97	3,914	98	5,374
Sandy Point	99	7,824	101	9,978	86	8,886	85	6,795					185	16,710	186	16,773
Sydney	278	536,401	354	744,178	1,264	1,422,124	1,204	1,219,874					1,542	1,958,525	1,558	1,964,052
Louisburg	145	43,458	138	56,686	123	90,974	136	86,375					268	134,431	274	143,061
Port Morien					13	1,846	13	1,846					13	1,846	13	1,846
Truro			6	1,616	33	4,439	28	3,293					33	4,439	34	4,909
Great Village					22	640	22	640					22	640	22	640

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

NOVA SCOTIA-Concluded—**NOUVELLE-ÉCOSSE**-Fin

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes–Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Weymouth	22	6,214	28	9,620	247	15,992	240	13,428	.....	.....	.....	.....	269	22,206	268	23,048
Belliveau's Cove	10	1,937	18	2,584	98	4,119	92	3,281	.....	.....	.....	.....	108	6,056	110	5,865
Church Point	1	58	3	386	12	921	10	593	.....	.....	.....	.....	13	979	13	979
Meteghan River	3	565	.....	.....	44	2,579	45	2,902	.....	.....	.....	.....	47	3,144	45	2,902
Salmon River	4	532	2	272	31	1,008	33	1,266	.....	.....	.....	.....	35	1,540	35	1,538
Windsor	181	233,556	193	238,649	240	68,259	230	63,897	.....	.....	.....	.....	421	301,815	423	302,546
Hantsport	2	999	1	316	28	1,256	29	1,936	.....	.....	.....	.....	30	2,255	30	2,252
Maitland	4	1,459	9	3,395	29	4,910	24	3,074	.....	.....	.....	.....	33	6,369	33	6,469
Yarmouth	326	245,134	296	240,179	498	32,243	551	37,341	.....	.....	.....	.....	824	277,377	847	277,520
Lower East Pubnico	29	1,671	27	1,607	62	1,826	65	2,004	.....	.....	.....	.....	91	3,497	92	3,611
Nova Scotia, Total	**4,765**	**5,232,250**	**5,124**	**5,693,008**	**21,352**	**4,228,760**	**21,357**	**3,883,513**	.....	.....	.....	.....	**26,117**	**9,461,010**	**26,481**	**9,576,521**

PRINCE EDWARD ISLAND—ILE DU PRINCE-ÉDOUARD

Charlottetown	35	34,624	59	53,956	898	184,087	873	164,386	.....	.....	.....	.....	933	218,711	932	218,342
Cardigan	.....	.....	.....	.....	19	641	20	694	.....	.....	.....	.....	19	641	20	694
Georgetown	11	5,068	15	6,713	128	8,777	125	7,263	.....	.....	.....	.....	139	13,845	140	13,976
Montague	7	438	9	601	68	2,995	65	2,717	.....	.....	.....	.....	75	3,433	74	3,318
Murray Harbour	6	160	6	160	106	3,415	102	3,209	.....	.....	.....	.....	112	3,575	108	3,369
Souris	13	3,510	10	2,078	144	47,141	149	48,644	.....	.....	.....	.....	157	50,651	159	50,722
Victoria	.....	.....	.....	.....	83	14,798	84	14,866	.....	.....	.....	.....	83	14,798	84	14,866

Summerside	10	8,401	6	5,189	98	8,046	103	11,390	.....	.....	.....	.....	108	16,447	109	16,579
Alberton	.....	.....	.....	.....	15	705	14	650	.....	.....	.....	.....	15	705	14	650
Tignish	.....	.....	.....	.....	8	468	7	440	.....	.....	.....	.....	8	468	7	440
Prince Edward Island, Total	**82**	**52,201**	**105**	**68,697**	**1,567**	**271,073**	**1,542**	**254,259**	.....	.....	.....	.....	**1,649**	**323,274**	**1,647**	**322,956**
NEW BRUNSWICK—NOUVEAU-BRUNSWICK																
Bathurst	74	5,469	66	4,918	313	13,215	316	13,680	.....	.....	.....	.....	387	18,684	382	18,598
Caraquet	112	1,981	113	2,000	75	3,176	76	3,264	.....	.....	.....	.....	187	5,157	189	5,264
Shippegan	25	963	28	1,587	252	7,422	253	6,766	.....	.....	.....	.....	277	8,385	281	8,353
Campbellton	8	10,325	24	28,685	89	29,864	73	11,491	.....	.....	.....	.....	97	40,189	97	40,176
Dalhousie	1	778	1	778	9	284	10	327	.....	.....	.....	.....	10	1,062	11	1,105
Chatham	9	14,416	18	19,954	145	53,742	136	47,316	.....	.....	.....	.....	154	68,158	154	67,270
Buctouche	.....	.....	2	1,396	14	1,950	11	547	.....	.....	.....	.....	14	1,950	13	1,943
Richibucto	4	3,149	9	5,495	49	5,870	43	2,207	.....	.....	.....	.....	53	9,019	52	7,702
Moncton	6	2,880	6	4,124	110	6,105	108	4,799	.....	.....	.....	.....	116	8,985	114	8,923
Albert	8	3,234	11	4,075	33	2,319	31	1,521	.....	.....	.....	.....	41	5,553	42	5,596
Dorchester	.....	.....	.....	.....	6	224	6	224	.....	.....	.....	.....	6	224	6	224
Hillsboro	16	10,395	16	10,278	3	260	2	338	.....	.....	.....	.....	19	10,655	18	10,616
Shediac	.....	.....	.....	.....	15	274	17	318	.....	.....	.....	.....	15	274	17	318
Newcastle	4	9,012	7	6,580	44	5,295	42	7,781	.....	.....	.....	.....	48	14,307	49	14,361
Sackville	.....	.....	.....	.....	2	70	2	70	.....	.....	.....	.....	2	70	2	70
Port Elgin	3	58	3	73	25	759	26	822	.....	.....	.....	.....	28	817	29	895
St. Andrews	1,499	46,019	1,358	45,034	642	30,194	650	28,962	.....	.....	.....	.....	2,141	76,213	2,008	73,996
Campo Bello	841	36,950	549	44,037	198	27,855	206	28,322	.....	.....	.....	.....	1,039	64,805	755	72,359
Lord's Cove	914	13,340	848	16,770	116	4,948	133	5,435	.....	.....	.....	.....	1,030	18,288	981	22,205
North Head	310	29,917	333	29,863	128	5,935	148	6,250	.....	.....	.....	.....	438	35,852	481	36,113
St. John	968	1,335,528	833	1,071,468	1,825	382,548	2,020	662,301	.....	.....	.....	.....	2,793	1,718,076	2,853	1,733,769
St. George	44	1,043	42	1,349	43	2,687	43	2,687	.....	.....	.....	.....	87	3,730	85	4,036
St. Stephen	19	4,355	10	2,958	169	10,247	177	11,728	.....	.....	.....	.....	188	14,602	187	14,686
New Brunswick, Total	**4,865**	**1,529,812**	**4,277**	**1,301,422**	**4,305**	**595,243**	**4,529**	**847,156**	.....	.....	.....	.....	**9,170**	**2,125,055**	**8,806**	**2,148,578**

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

QUÉBEC

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Beebe Junction																
Georgeville									5	63	5	63	5	63	5	63
Magog									1	50	1	50	1	50	1	50
Chicoutimi	2	2,135			123	69,323	135	85,130	9	8,705	1	892	134	80,163	136	86,022
Port Alfred	34	65,533	33	56,255	130	251,966	128	226,761	1	1,407	4	3,964	165	318,906	165	286,980
Gaspé	23	33,954	20	13,973	151	135,910	145	131,246					174	169,864	165	145,219
Hull					153	22,622	159	23,575	83	10,897	83	10,897	236	33,519	242	34,472
Montreal	1,204	4,076,747	1,173	4,148,127	5,483	4,350,952	5,158	3,655,162	1,011	1,116,570	1,620	1,819,034	7,698	9,544,269	7,951	9,622,323
Paspebiac	3	4,788			130	19,984	126	12,525	3	4,788	7	11,172	136	29,560	133	23,697
Percé					7	3,447	7	3,447					7	3,447	7	3,447
Chandler					43	36,756	43	36,756					43	36,756	43	36,756
Quebec	417	2,218,524	256	1,204,206	1,959	1,842,753	2,213	2,860,408	252	76,066	202	84,207	2,628	4,137,343	2,671	4,148,821
Amherst Harbour	1	396	1	396	154	51,835	158	52,312					155	52,231	159	52,708

Bonne Espérance	28	9,167	28	9,237	12	5,752	11	5,742					40	14,919	39	14,979
Havre St. Pierre					59	25,141	59	25,141					59	25,141	59	25,141
Lévis	3	8,576			65	163,617	70	173,932	2	1,722			70	173,915	70	173,932
Montmagny					4	841	5	1,091					4	841	5	1,091
Pointe au Pic	1	671	3	2,142	2	1,471							3	2,142	3	2,142
Port Menier					136	81,368	136	81,368	1	707			137	82,075	136	81,368
Rivière du Loup					134	19,336	135	19,481					134	19,336	135	19,481
Trois Pistoles					3	140	3	140					3	140	3	140
Rimouski	68	79,959	68	79,959					63	72,662	63	72,572	131	152,621	131	152,531
Sorel	7	22,538	6	10,892	750	958,648	746	964,152	20	5,102	27	13,250	777	986,288	779	988,294
St. Johns					2	30	3	52	295	31,652	485	58,276	297	31,682	488	58,328
Three Rivers	60	183,512	62	187,556	1,748	1,397,634	1,738	1,396,046	145	67,811	151	68,505	1,953	1,648,957	1,951	1,652,107
Valleyfield									8	993	8	993	8	993	8	993
Quebec, Total	**1,851**	**6,706,500**	**1,650**	**5,712,743**	**11,248**	**9,439,526**	**11,178**	**9,754,467**	**1,899**	**1,399,195**	**2,657**	**2,143,875**	**14,998**	**17,545,221**	**15,485**	**17,611,085**
ONTARIO																
Amherstburg					31	11,220	29	8,651	1,631	386,990	1,629	391,025	1,662	398,210	1,658	399,676
Kingsville					232	53,759	230	52,641	387	3,921	390	4,941	619	57,680	620	57,582
Leamington					394	86,286	394	85,977	3	15	3	15	397	86,301	397	85,992
West Dock					219	47,968	219	47,968	264	16,332	264	16,370	483	64,300	483	64,338
Belleville					104	44,261	99	47,340	264	72,835	267	69,742	368	117,096	366	117,082
Bridgeburg					8	114	5	111	195	9,369	218	7,958	203	9,483	223	8,069
Brockville					192	198,923	184	194,643	659	193,479	668	197,820	851	392,402	852	392,463
Chatham					45	7,191	38	6,163	51	10,802	55	11,434	96	17,993	93	17,597
Erieau					18	4,496	20	3,770	302	182,696	302	181,478	320	187,192	322	185,248
Cobourg					13	16,720	11	10,427	636	2,089,054	661	2,106,659	649	2,105,774	672	2,117,086
Brighton					21	24,012	21	24,012	42	44,566	40	44,560	63	68,578	61	68,572

No. 20.—STATEMENT showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Continued*

N° 20.—ÉTAT indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

ONTARIO-Continued—Suite

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Collingwood					61	62,816	57	45,713	6	14,644	13	36,299	67	77,460	70	82,012
Meaford					48	12,825	45	12,744	3	5,285	3	5,285	51	18,110	48	18,029
Cornwall					126	87,262	73	26,168					126	87,262	73	26,168
Aultsville					58	13,224	58	13,224					58	13,224	58	13,224
Deseronto					10	1,074	10	1,074	1	5	1	5	11	1,079	11	1,079
Fort Frances																
Rainy River					15	463	17	291	45	492	55	802	60	955	72	1,093
Fort William					772	1,900,478	792	1,890,999	687	2,368,452	601	2,073,411	1,459	4,268,930	1,393	3,964,410
Gananoque					80	16,029	80	16,029	4,792	110,396	4,792	110,396	4,872	126,425	4,872	126,425
Rockport					50	11,400	50	11,400	545	2,180	533	2,132	595	13,580	583	13,532
Goderich					97	202,820	46	85,280	18	41,343	68	167,706	115	244,163	114	252,986
Kincardine							1	1,327	7	13,802	6	12,475	7	13,802	7	13,802
Southampton					7	267	8	299					7	267	8	299

Hamilton					613	393,552	468	240,794	78	56,963	84	66,822	691	450,515	552	307,616
Dunnville					5	184	4	138					5	184	4	138
Port Maitland					67	1,778	58	2,780	220	49,737	226	48,540	287	51,515	284	51,320
Kenora					13	237	16	495	174	5,399	166	5,097	187	5,636	182	5,592
Kingston					459	349,127	447	307,523	1,427	595,414	1,389	616,462	1,886	944,541	1,836	923,985
Wolfe Island									23	224	20	178	23	224	20	178
Midland					148	233,103	161	207,375	128	381,194	133	418,196	276	614,297	294	625,571
Penetanguishene							2	142	3	4,531	3	4,531	3	4,531	5	4,673
Morrisburg					72	16,633	70	14,470	16	1,815	14	1,425	88	18,448	84	15,895
Iroquois					62	14,136	62	14,136	2	376	2	376	64	14,512	64	14,512
Napanee					1	87	1	87	3	555	3	555	4	642	4	642
Bath					135	12,330	138	12,396	9	716	6	650	144	13,046	144	13,046
Niagara Falls					423	385,813	259	243,195	447	423,148	611	565,766	870	808,961	870	808,961
Chippawa					9	76	33	173	33	213	11	123	42	289	44	296
Niagara					925	831,917	1,115	982,369	484	400,783	292	250,328	1,409	1,232,700	1,407	1,232,697
North Bay																
Moose Factory	1	1,487	1	1,487									1	1,487	1	1,487
Ottawa					95	11,682	92	11,430	7	1,065	7	1,065	102	12,747	99	12,495
Smith Falls					28	4,396	28	4,396					28	4,396	28	4,396
Owen Sound					346	226,780	339	207,544	45	107,062	56	146,326	391	333,842	395	353,870
Wiarton					13	1,605	17	2,683	3	3,006	2	2,654	16	4,611	19	5,337
Parry Sound					75	28,299	75	29,581	22	29,972	22	29,972	97	58,271	97	59,553
Byng Inlet					6	609	26	42,987	95	250,482	76	202,601	101	251,091	102	245,588
Depot Harbour					14	36,118	6	24,613	114	232,902	122	245,797	128	269,020	128	270,410
Key Harbour							1	2,450	22	49,632	21	47,192	22	49,632	22	49,642
Picton					206	30,467	209	30,968	23	3,774	20	3,054	229	34,241	229	34,022
rtArthur					691	1,657,867	743	1,718,108	699	1,980,294	771	2,717,302	1,390	3,638,161	1,514	4,435,410
Port Hope					8	2,384	4	1,252	2	166	3	1,088	10	2,550	7	2,340

No. 20.—Statement showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces Ports and Outports—*Continued*

N° 20.—État indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Suite*

ONTARIO—Concluded—Fin

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes—Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
Port McNicoll					192	465,488	188	428,725	88	307,772	99	363,993	280	773,260	287	792,718
Prescott					364	357,916	387	392,364	464	169,832	407	81,436	828	527,748	794	473,800
Cardinal					9	4,440	9	4,440	60	25,262	60	26,233	69	29,702	69	30,673
Sarnia					404	258,934	457	226,518	1,293	358,589	1,243	372,686	1,697	617,523	1,700	599,204
Courtright					87	57,834	87	60,194	200	12,376	198	10,242	287	70,210	285	70,436
Point Edward					324	468,635	337	492,628	432	376,610	422	354,908	756	845,245	759	847,536
Sault Ste. Marie					2,002	1,401,407	2,033	1,591,131	751	823,761	977	800,702	2,753	2,225,168	3,010	2,391,833
Blind River					111	35,605	108	34,466	50	23,091	51	23,225	161	58,696	159	57,691
Bruce Mines					132	24,422	129	24,566	12	157	11	694	144	24,579	140	25,260
Cockburn Island					118	35,186	115	34,556	41	11,048	42	10,900	159	46,234	157	45,456
Cutler					187	27,664	186	27,088					187	27,664	186	27,088
Gore Bay					444	108,584	446	107,879	61	4,960	62	5,781	505	113,544	508	113,660
Little Current					251	81,885	265	109,336	72	111,800	55	26,395	323	193,685	320	135,731
Michipicoten Harbour									18	26,302	18	26,302	18	26,302	18	26,302
Thessalon					266	74,783	263	71,936	70	24,264	74	25,945	336	99,047	337	97,881
Simcoe																
Port Dover					29	678	32	870	475	99,933	474	99,912	504	100,611	506	100,782
St. Catharines																
Port Dalhousie					611	336,078	556	311,049	184	9,139	231	18,817	795	345,217	787	329,866
Thorold					93	102,332	12	12,825	5	2,959	86	93,726	98	105,291	98	106,551

St. Thomas																
Port Stanley					41	1,208	89	47,348	165	179,000	165	179,000	206	180,208	254	226,348
Tillsonburg																
Port Burwell					20	540	21	508	5	112	3	105	25	652	24	613
Toronto					1,311	945,269	976	601,313	981	902,222	1,020	909,845	2,292	1,847,491	1,996	1,511,158
Trenton					47	7,948	40	5,914	11	1,754	20	3,830	58	9,702	60	9,744
Wallaceburg					209	55,711	170	44,640	79	68,503	114	79,988	288	124,214	284	124,628
Welland					68	65,831	19	17,290	49	39,772	73	67,513	117	105,603	92	84,803
Port Colborne					1,606	2,256,758	1,484	1,566,309	1,155	778,461	1,362	1,443,329	2,761	3,035,219	2,846	3,009,638
Whitby					1	4	2	10	83	606	83	610	84	610	85	620
Windsor					292	231,714	259	221,096	509	686,092	535	704,697	801	917,806	794	925,793
Belle River									300	1,421	299	1,453	300	1,421	299	1,453
Sandwich					16	2,460	20	4,185	6,197	37,921	6,157	55,853	6,213	40,381	6,177	60,038
Walkerville					178	65,813	189	112,871	4,694	109,507	4,233	87,770	4,872	175,320	4,422	200,641
Ontario, Total	**1**	**1,487**	**1**	**1,487**	**16,428**	**14,517,915**	**15,740**	**13,249,391**	**33,121**	**15,339,307**	**33,203**	**16,692,503**	**49,559**	**29,858,709**	**48,944**	**29,934,381**
MANITOBA																
Winnipeg	2	1,843	1	1,487	10	1,167	8	748					12	3,010	9	2,235
York Factory	1	1,487	1	1,487	1	64	1	64					2	1,551	2	1,551
Manitoba, Total	**3**	**3,330**	**2**	**2,974**	**11**	**1,231**	**9**	**812**					**14**	**4,561**	**11**	**3,786**
BRITISH COLUMBIA—COLOMBIE-BRITANNIQUE																
Nanaimo	754	143,441	914	338,918	3,140	937,532	3,108	944,493					3,894	1,080,973	4,022	1,283,411
Chemainus	217	108,846	271	253,534	387	71,572	372	65,673					604	180,418	643	319,207
Ladysmith	248	125,139	247	84,849	2,061	823,519	2,067	846,033					2,309	948,658	2,314	930,882
Port Alberni	35	82,944	53	158,800	375	92,917	379	91,310					410	175,861	432	250,110
Union Bay	38	28,528	90	173,750	779	223,128	778	231,700					817	261,656	868	405,450
Nelson					2,601	1,248,251	2,400	965,371					2,601	1,248,251	2,400	965,371
Kaslo					469	315,410	468	314,809					469	315,410	468	314,809

No. 20.—Statement showing the Total Number and Tonnage of all Vessels, Arrived and Departed, by Provinces, Ports and Outports—*Concluded*

N° 20.—État indiquant le nombre total et le tonnage de tous les navires entrés et sortis, par provinces, ports et ports secondaires—*Fin*

BRITISH COLUMBIA—Concluded—**COLOMBIE-BRITANNIQUE**—Fin

Ports and Outports — Ports et ports secondaires	Sea going—Long-courriers				Coastwise—Cabotiers				Rivers and Lakes-Rivières et lacs				Total			
	Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis		Arrived — Arrivés		Departed — Partis	
	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré	Vessels — Navires	Tons register — Tonnage enregistré
New Westminster	172	490,882	175	505,353	1,514	431,491	1,612	423,531	.....	.....	.....	.....	1,686	922,373	1,787	928,884
Ladner	3	432	2	418	121	6,982	128	6,002	.....	.....	.....	.....	124	7,414	130	6,420
Steveston	86	4,068	61	1,952	515	25,519	559	20,276	.....	.....	.....	.....	601	29,587	620	22,228
White Rock	25	1,414	18	1,145	75	1,936	88	2,283	.....	.....	.....	.....	100	3,350	106	3,428
Prince Rupert	2,259	300,152	2,263	330,450	2,220	874,940	2,307	833,052	.....	.....	.....	.....	4,479	1,175,092	4,570	1,163,502
Anyox	9	11,431	88	117,075	514	300,108	434	191,893	.....	.....	.....	.....	523	311,539	522	308,968
Butedale	121	4,436	120	4,842	1,009	246,979	1,015	247,660	.....	.....	.....	.....	1,130	251,415	1,135	252,502
Ocean Falls	5	8,852	74	138,371	1,020	535,873	961	431,886	.....	.....	.....	.....	1,025	544,725	1,035	570,257
Stickeen	.....	.....	.....	.....	42	1,279	43	1,296	42	1,279	43	1,296	84	2,558	86	2,592
Stewart	69	54,402	23	15,330	182	165,558	229	211,674	.....	.....	.....	.....	251	219,960	252	227,004
Vancouver	2,357	5,474,250	2,300	5,353,708	14,015	5,001,903	14,274	5,188,455	.....	.....	.....	.....	16,372	10,476,153	16,574	10,542,163
Alert Bay	58	37,449	57	37,300	1,288	722,752	1,290	726,021	.....	.....	.....	.....	1,346	760,201	1,347	763,321
Britannia Beach	26	56,644	26	56,674	582	163,754	582	163,754	.....	.....	.....	.....	608	220,398	608	220,428
Powell River	115	199,155	115	201,155	1,874	910,413	1,792	813,540	.....	.....	.....	.....	1,989	1,109,568	1,907	1,014,695
Victoria	2,179	3,365,495	2,044	3,229,879	4,456	2,939,613	4,614	3,146,550	.....	.....	.....	.....	6,635	6,305,108	6,658	6,376,429
Bamfield	8	372	8	187	109	18,043	113	18,281	.....	.....	.....	.....	117	18,415	121	18,468
Quatsino	30	58,502	11	32,658	166	85,036	181	106,704	.....	.....	.....	.....	196	143,538	192	139,362
Sidney	522	158,433	508	157,108	260	27,021	275	27,797	.....	.....	.....	.....	782	185,454	783	184,905
British Columbia, Total	**9,336**	**10,715,267**	**9,468**	**11,193,456**	**39,774**	**16,181,529**	**40,069**	**16,020,044**	**42**	**1,279**	**43**	**1,296**	**49,152**	**26,898,075**	**49,580**	**27,214,796**

YUKON

Dawson	.....	.....	.....	.....	66	33,587	62	33,021	10	5,248	14	5,254	76	38,835	76	38,275
Forty Mile	.....	.....	.....	.....	1	603	1	603	.....	.....	.....	.....	1	603	1	603
White Horse	.....	.....	.....	.....	140	45,725	138	45,370	1	603	1	603	141	46,328	139	45,973
Carcross	.....	.....	.....	.....	89	66,394	89	66,394	.....	.....	.....	.....	89	66,394	89	66,394
Yukon, Total	.....	.....	.....	.....	**296**	**146,309**	**290**	**145,388**	**11**	**5,851**	**15**	**5,857**	**307**	**152,160**	**305**	**151,245**

RECAPITULATION—BY PROVINCES—PAR PROVINCES

Nova Scotia	**4,765**	**5,232,250**	**5,124**	**5,693,008**	**21,352**	**4,228,760**	**21,357**	**3,883,513**	.....	.....	.....	.....	**26,117**	**9,461,010**	**26,481**	**9,576,521**
Prince Edward Island	**82**	**52,201**	**105**	**68,697**	**1,567**	**271,073**	**1,542**	**254,259**	.....	.....	.....	.....	**1,649**	**323,274**	**1,647**	**322,956**
New Brunswick	**4,865**	**1,529,812**	**4,277**	**1,301,422**	**4,305**	**595,243**	**4,529**	**847,156**	.....	.....	.....	.....	**9,170**	**2,125,055**	**8,806**	**2,148,578**
Quebec	**1,851**	**6,706,500**	**1,650**	**5,712,743**	**11,248**	**9,439,526**	**11,178**	**9,754,467**	**1,899**	**1,399,195**	**2,657**	**2,143,875**	**14,998**	**17,545,221**	**15,485**	**17,611,085**
Ontario	**1**	**1,487**	**1**	**1,487**	**16,428**	**14,517,915**	**15,740**	**13,240,391**	**33,121**	**15,339,307**	**33,203**	**16,692,503**	**49,550**	**29,858,709**	**48,944**	**29,934,381**
Manitoba	**3**	**3,330**	**2**	**2,974**	**11**	**1,231**	**9**	**812**	.....	.....	.....	.....	**14**	**4,561**	**11**	**3,786**
British Columbia	**9,336**	**10,715,267**	**9,468**	**11,193,456**	**39,774**	**16,181,529**	**40,069**	**16,020,044**	**42**	**1,279**	**43**	**1,296**	**49,152**	**26,898,075**	**49,580**	**27,214,796**
Yukon	.....	.....	.....	.....	**296**	**146,309**	**290**	**145,388**	**11**	**5,851**	**15**	**5,857**	**307**	**152,160**	**305**	**151,245**
Grand Total	**20,903**	**24,240,847**	**20,627**	**23,973,787**	**94,981**	**45,381,586**	**94,714**	**44,146,030**	**35,073**	**16,745,632**	**35,918**	**18,843,531**	**150,957**	**86,368,065**	**151,259**	**86,963,348**

DEPARTMENT OF TRADE AND COMMERCE
OTTAWA, CANADA

MINISTER
Hon. JAMES MALCOLM

DEPUTY MINISTER
F. C. T. O'HARA

THIRTY-SIXTH ANNUAL REPORT

OF THE

DEPARTMENT OF TRADE AND COMMERCE

FOR THE

FISCAL YEAR ENDING MARCH 31, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

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To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Report of the Department of Trade and Commerce for the fiscal year ended March 31, 1928.

All of which is respectfully submitted.

JAMES MALCOLM,
Minister of Trade and Commerce.

DEPARTMENT OF TRADE AND COMMERCE,
OTTAWA.

Report of the Deputy Minister

OTTAWA, June 15, 1928.

The Hon. JAMES MALCOLM, M.P.,
Minister of Trade and Commerce,
Ottawa.

SIR,—I have the honour to present herewith the thirty-sixth Annual Report of the Department of Trade and Commerce, that is to say, for the fiscal year ended March 31, 1928.

CANADA'S FOREIGN TRADE, 1927-28

The foreign trade of Canada, on the whole, during the fiscal year 1927-28 was satisfactory. The total trade for the year, amounting to $2,359,412,000, was exceeded on only two previous occasions, viz., the war year 1918 and the post-bellum boom year 1921. The physical volume, however, of Canada's trade in 1928 was greater than in any previous year on record. The increase in imports was responsible for this improvement, as there was a slight decline in exports. The gradual growth in Canada's trade prior to the war, the expansion during the war period, the decline and subsequent improvement after the war, resulted in the Dominion having a favourable trade balance in 1926 of $401,-400,000. During the past two years imports have increased rapidly while gross export values have declined slightly, due largely to lower export prices, with the result that on March 31, 1928, the favourable trade balance was reduced to $141,500,000. The decline, however, in the Dominion's trade balance does not necessarily reflect a curtailment of industrial activities, as there have been marked improvements in many lines of industries during the past year or so. It reflects rather a greater purchasing power, not only at home but also abroad.

QUANTITY AND PRICE CHANGES

Only moderate changes have taken place in the average level of prices during the past three or four years. Comparison of pre-war prices, however, with those during and immediately after the war show that changes in the level of prices have materially affected the comparability of trade statistics. Statistics have not been compiled for fiscal year 1928 making allowances for the marked fluctuation in the average level of prices. Figures compiled for the years 1921 to 1927, based on 1914 average import and export values, show that the Dominion's imports in 1927, valued at 1914 average import values, were $135,193,000 greater than for the record year 1926; while the domestic exports, revalued at 1914 average export values, were only $21,366,000 less than for the previous year, also a record year. Canada's total foreign trade, from 1921 to 1927, on the basis of declared values, decreased about 6 per cent., imports 17 per cent, while exports increased about 5 per cent; but when price changes have been eliminated the total trade from 1921 to 1927 increased about 50 per cent, imports 37 per cent, and exports 61 per cent.

ANALYSIS OF CANADA'S TRADE

The total trade of Canada for the fiscal year ended March 31, 1928, was valued at $2,359,412,000, compared with $2,298,466,000 in 1927, and $2,256,-029,000 in 1926, the increase over 1927 amounting to $60,946,000 or 2·2 per cent, and over 1926 to $103,383,000, or 4·6 per cent. Imports in fiscal year

1928 show a decided improvement over 1927 and 1926, while exports show a decline. Imports in 1928 amounted to $1,108,956,000, compared with an importation in 1927 valued at $1,030,893,000, and in 1926 at $927,329,000; the increase in the imports over 1927 amounting to $78,063,000, or 7·3 per cent, and over 1926 to $181,627,000, or 19·6 per cent. Export trade (domestic and foreign combined) was valued at $1,250,456,000 in 1928, at $1,267,573,000 in 1927, and $1,328,700,000 in 1926; the decrease in 1928 compared with 1927 amounting to $17,117,000 or 1·4 per cent, and compared with 1926 to $78,244,000 or 5·9 per cent. The domestic exports of Canada in 1928 totalled $1,228,208,000; in 1927, $1,252,158,000; and in 1926 $1,315,356,000; the decrease in 1928 compared with 1927 amounting to $23,950,000 or 1·9 per cent, and with 1926 to $87,148,000 or 6·7 per cent.

The statistics in the following table indicate the trend of Canadian trade from 1914 to 1928 (a) with all countries; (b) with the United Kingdom; and (c) with the United States.

SUMMARY OF TREND OF CANADIAN TRADE, 1914 TO 1928

(Values in Millions of Dollars)

Years ended March 31	Imports into Canada				Exports from Canada			Excess of Imports (i) Exports (e)	Percentage relation of Exports to Imports
	Dutiable Goods	Free Goods	Total Imports	Per Cent Free	Canadian Produce	Foreign Produce	Total Exports		
(a) With All Countries									
1914	410·3	208·9	619·2	33·7	431·6	23·8	455·4	(i) 163·8	73·5
1915	279·8	176·1	455·9	38·6	409·4	52·0	461·4	(e) 5·5	101·2
1916	289·4	218·8	508·2	43·0	741·6	37·7	779·3	(e) 271·1	153·3
1917	461·7	384·7	846·4	45·4	1,151·4	27·8	1,179·2	(e) 332·8	139·3
1918	542·3	421·2	963·5	43·7	1,540·0	46·1	1,586·1	(e) 622·6	164·6
1919	526·5	393·2	919·7	42·7	1,216·4	52·3	1,268·7	(e) 349·0	137·9
1920	693·6	370·9	1,064·5	34·8	1,239·5	47·1	1,286·6	(e) 222·1	120·9
1921	847·5	392·6	1,240·1	31·6	1,189·2	21·2	1,210·4	(i) 29·7	97·6
1922	495·6	252·2	747·8	33·7	740·2	13·7	753·9	(e) 6·1	100·8
1923	537·3	265·3	802·6	33·0	931·5	13·8	945·3	(e) 142·7	117·7
1924	591·3	302·1	893·4	33·8	1,045·4	13·4	1,058·8	(e) 165·4	118·5
1925	516·0	280·9	796·9	35·1	1,069·1	12·3	1,081·4	(e) 284·5	135·7
1926	583·0	344·3	927·3	37·1	1,315·4	13·3	1,328·7	(e) 401·4	143·1
1927	659·9	371·0	1,030·9	36·0	1,252·2	15·4	1,267·6	(e) 236·7	123·0
1928	710·0	398·9	1,108·9	36·0	1,228·2	22·2	1,250·4	(e) 141·5	112·7
(b) With the United Kingdom									
1914	102·4	29·7	132·1	22·5	215·2	7·1	222·3	(e) 90·2	167·5
1915	68·0	22·1	90·1	24·5	186·6	25·1	211·7	(e) 121·6	234·9
1916	52·0	25·4	77·4	32·8	451·9	11·2	463·1	(e) 385·7	598·3
1917	75·5	31·6	107·1	29·5	742·1	13·9	756·0	(e) 648·9	705·9
1918	58·0	23·3	81·3	28·6	845·5	15·6	861·1	(e) 779·8	1,059·1
1919	50·0	23·0	73·0	31·5	540·7	20·1	560·8	(e) 487·8	768·2
1920	93·2	33·1	126·3	26·2	489·2	6·8	496·0	(e) 369·7	392·7
1921	170·1	43·8	213·9	20·5	312·8	1·4	314·2	(e) 100·3	146·9
1922	95·1	22·0	117·1	18·8	299·4	1·0	300·4	(e) 183·3	256·5
1923	116·2	25·1	141·3	17·7	379·1	0·8	379·9	(e) 238·6	268·8
1924	126·1	27·5	153·6	17·8	360·1	1·1	361·2	(e) 207·6	235·1
1925	124·7	26·4	151·1	17·5	395·9	1·3	397·2	(e) 246·1	262·8
1926	133·1	30·6	163·7	18·6	508·2	1·1	509·3	(e) 345·6	311·1
1927	135·0	28·9	163·9	17·6	446·9	1·1	448·0	(e) 284·1	273·3
1928	150·1	35·8	185·9	19·3	410·7	2·1	412·8	(e) 226·9	222·1
(c) With the United States									
1914	249·5	146·8	396·3	37·0	163·4	13·6	177·0	(i) 219·3	44·6
1915	168·6	128·5	297·1	43·2	173·3	13·0	186·3	(i) 110·8	62·7
1916	199·5	171·4	370·9	46·2	201·1	15·6	216·7	(i) 154·2	59·4
1917	332·0	333·3	665·3	50·1	280·6	10·0	290·6	(i) 374·7	43·7
1918	429·3	363·6	792·9	45·8	417·2	23·6	440·8	(i) 352·1	55·6
1919	416·5	333·7	750·2	44·5	454·9	22·8	477·7	(i) 272·5	63·7
1920	499·7	301·4	801·1	37·6	464·0	37·1	501·1	(i) 300·0	62·5
1921	544·0	312·2	856·2	36·5	542·3	18·4	560·7	(i) 295·5	65·5
1922	312·1	203·9	516·0	39·5	292·6	11·5	304·1	(i) 211·9	58·9
1923	332·2	208·8	541·0	38·6	369·1	11·2	380·3	(i) 160·7	70·3
1924	355·9	245·3	601·2	40·8	430·7	10·9	441·6	(i) 159·6	73·4
1925	287·1	222·7	509·8	43·7	417·4	9·8	427·2	(i) 82·6	83·8
1926	338·0	270·6	608·6	44·5	474·9	11·0	485·9	(i) 122·7	79·7
1927	392·7	294·3	687·0	42·9	466·4	12·9	479·3	(i) 207·7	69·7
1928	415·0	303·4	719·4	42·2	478·0	18·6	496·6	(i) 222·8	69·0

Canada's Trade by Countries, 1927-28

The imports from foreign countries in fiscal year 1928 amounted to $859,-876,000 and from the British Empire to $249,080,000, the increase in 1928 over 1927 in the case of foreign countries amounting to $43,052,000 and in that of the British Empire to $35,011,000; while the exports to foreign countries totalled $728,930,000 and to the British Empire to $499,278,000, the exports to foreign countries showing an increase of $17,210,000, and to the British Empire a decrease of $41,160,000. The trade of Canada, both import and export, with the United States exceeds that of any other country. In 1928 imports from the United States were valued at $719,444,000 and domestic exports at $478,006,000, the increase in imports being $32,421,000 and exports $11,583,000. The trade of Canada with the United Kingdom comes next in order of importance. Imports from the United Kingdom in 1928 amounted to $185,889,000 and exports to $410,704,000, the increase in imports over 1927 amounting to $21,950,000 and the decrease in exports to $36,169,000. Imports from Germany in 1928 were valued at $17,056,000 and exports at $42,244,000, the increase in imports being $2,026,000 and in exports $7,833,000. The imports from Japan and the Netherlands were $12,505,000 and $8,749,000 respectively, the increase in imports being: Japan $1,335,000 and the Netherlands $1,055,000; and the exports were $32,-957,000 and $35,538,000 respectively, the increase in exports being: Japan $3,028,000 and the Netherlands $9,164,000. Imports in Canada from France, Belgium, Italy, and Argentina show increases, but the exports to these countries show decreases. For further information as to the trade with other principal countries see the following table.

CANADA'S TRADE WITH PRINCIPAL COUNTRIES, 1927-28
Note: Countries arranged in order of importance.

Rank	Countries	Imports for Consumption 1927-28	Exports, (Domestic) 1927-28	Increase (+) or Decrease (—) 1927-28 compared with 1926-27			
				Imports		Exports	
		Thousand $	Thousand $	Thousand $		Thouand $	
1	United States	719,444	478,006	(+)	32,421	(+)	11,583
2	United Kingdom	185,889	410,704	(+)	21,950	(—)	36,169
3	Germany	17,056	42,244	(+)	2,026	(+)	7,833
4	Japan	12,505	32,957	(+)	1,335	(+)	3,028
5	Netherlands	8,749	35,538	(+)	1,055	(+)	9,164
6	France	26,474	9,946	(+)	2,482	(—)	5,274
7	Belgium	9,944	20,782	(+)	281	(—)	559
8	Italy	4,242	18,743	(+)	798	(—)	4,072
9	Argentina	9,850	11,086	(+)	4,193	(—)	2,016
10	British India	9,240	11,043	(+)	1,359	(+)	1,048
11	New Zealand	8,262	11,367	(+)	3,684	(—)	2,172
12	Australia	5,302	14,192	(—)	994	(—)	4,774
13	China	2,572	13,432	(—)	2,470	(—)	85
14	Newfoundland	2,098	11,661	(+)	229	(+)	491
15	Cuba	5,587	5,387	(—)	2,490	(—)	1,441
16	Jamaica	5,481	4,984	(+)	721	(+)	676
17	Colombia	7,580	1,733	(+)	6,463	(+)	384
18	British South Africa	404	8,725	(—)	597	(+)	336
19	Switzerland	8,596	498	(—)	896	(—)	96
20	British Guiana	6,072	2,285	(+)	1,480	(—)	124
21	Barbados	6,216	1,837	(+)	2,425	(+)	213
22	Norway	1,064	6,666	(+)	153	(+)	1,638
23	British West Indies, Other	3,553	3,858	(+)	1,067	(+)	109
24	Brazil	2,088	4,897	(+)	118	(—)	2,394
25	Denmark	126	6,391	(—)	49	(+)	725
26	Peru	5,216	1,286	(—)	677	(—)	121
27	Sweden	1,862	4,612	(+)	218	(+)	1,196
28	Trinidad and Tobago	2,099	4,241	(—)	722	(+)	400
29	Fiji	4,318	298	(+)	3,087	(—)	19
30	Greece	254	4,282	(—)	75	(—)	1,741
31	Irish Free State	30	4,325	(—)	17	(—)	1,732
32	British Straits Settlements	2,459	1,492	(—)	298	(—)	968
33	Hong Kong	1,441	2,466	(+)	19	(+)	1,006

CANADA'S TRADE WITH PRINCIPAL COUNTRIES, 1927-28—*Concluded*
Note: Countries arranged in order of importance

Rank	Countries	Imports for Consumption 1927-28	Exports, (Domestic) 1927-1928	Increase (+) or Decrease (−) 1927-28 compared with 1926-27			
				Imports		Exports	
		Thousand $	Thousand $		Thousand $		Thousand $
34	Mexico	1,174	2,540	(−)	1,199	(−)	221
35	Dutch East Indies	1,131	2,364	(+)	274	(−)	1,288
	Total above 35 countries	1,088,378	1,196,868	(+)	77,354	(−)	25,436
	Total all Countries	1,108,956	1,228,208	(+)	78,063	(−)	23,950
	British Empire	249,080	499,278	(+)	35,011	(−)	41,160
	Foreign Countries	859,876	728,930	(+)	43,052	(+)	17,210

Canada's Import Trade, 1927-28

The increase in the import trade, 1928 compared with 1927, amounting to $78,063,000, was contributed to by increases in each of the main groups, except in the Non-metallic Minerals and Miscellaneous groups. The Agricultural and Vegetable Products group increased from $213,098,000 to $238,186,000, or $25,088,000. (Under this group alcoholic beverages increased $16,588,000; fruits, $4,082,000; corn, $2,147,000; vegetables, $1,581,000; and cocoa and chocolate, $1,367,000; while raw sugar decreased $2,109,000; and seeds, $1,211,000.) The Animals and Animal Products group increased from $53,214,000 to $65,790,000, or $12,576,000. (The chief increases under this group were: raw hides, $5,084,000; furs, $3,288,000; butter, $2,984,000; unmanufactured leather, $826,000; and fish, $471,000; while eggs in the shell decreased $840,000.) The Fibres and Textiles Products group increased from $183,584,000 to $186,996,000, or $3,412,000. (Principal imports under this group to show increases were: raw cotton, $4,469,000; artificial silk manufactures, $1,822,000; raw silk, $1,008,000; and jute cloth or canvas, $972,000; while imports of binder twine decreased $1,781,000; dyed cotton fabrics, $1,695,000; silk fabrics, $900,000; manila and sisal grass, $776,000; and dress goods (wool) to be dyed, $658,000.) The Wood, Wood Products and Paper group increased from $47,963,000 to $51,751,000, or $3,788,000. (Under this group unmanufactured wood increased $1,183,000; books and printed matter, $1,091,000; manufactured wood, $955,000; and paper, $558,000.) Iron and Its Products increased from $229,429,000 to $259,573,000, or $30,144,000. (The imports to show increases under this group were: farm implements, $10,690,000; machinery, $7,519,000; automobiles, $7,339,000; automobile parts, $2,901,000; and engines and boilers, $2,085,000; while rolling mill products decreased $2,626,000.) The Non-ferrous Metals Products group increased from $52,748,000 to $60,190,000, or $7,442,000. (The chief increases were: alumina and cryolite, $2,225,000; electric apparatus, $2,112,000; copper bars and rods, $1,044,000; and nickel-plated ware, $690,000.) The Non-metallic Minerals Products group decreased from $156,785,000 to $153,049,000, or $3,736,000. (The chief decreases were: anthracite coal, $3,271,000; crude petroleum oil, $2,364,000; refined petroleum oil, $765,000; and glass, $509,000; while the following show increases: coal and fuel oil for ships' stores, $2,815,000; clay products, $1,072,000; and asphalt, $430,000.) The Chemical and Allied Products group increased from $31,844,000 to $33,572,000, or $1,728,000. (The imports under this group showing increases were: fertilizers, $653,000; and paints and varnishes, $408,000.) Miscellaneous commodities decreased from $62,227,000 to $59,849,000, or $2,378,000.

For further information relative to Canada's imports in 1928, see the following tables showing "Canada's Imports by Main Groups, 1927-28," and "One Hundred Commodities Imported into Canada, 1927-28."

CANADA'S IMPORTS BY MAIN GROUPS, 1927-28

NOTE: Values in Thousands of Dollars

Main Groups	Total Imports 1927-28	Imports from		Increase (+) or Decrease (−) 1927-28 compared with 1926-27		
		United Kingdom	United States	Total	United Kingdom	United States
Agricultural and Vegetable Products	238,186	51,134	102,209	(+) 25,088	(+) 12,880	(+) 5,105
Animal Products	65,790	6,091	40,583	(+) 12,576	(+) 686	(+) 5,145
Fibres and Textiles	186,996	71,464	69,431	(+) 3,412	(−) 1,288	(+) 2,505
Wood and Paper	51,751	4,360	43,992	(+) 3,788	(+) 442	(+) 2,870
Iron and Its Products	259,573	17,726	233,991	(+) 30,144	(+) 2,717	(+) 27,336
Non-Ferrous Metals	60,190	5,795	48,386	(+) 7,442	(+) 152	(+) 6,160
Non-Metallic Minerals	153,049	14,468	117,448	(−) 3,736	(+) 5,214	(−) 14,507
Chemical Products	33,572	4,422	22,246	(+) 1,727	(−) 485	(+) 1,623
Miscellaneous	59,849	10,429	41,157	(−) 2,378	(+) 1,632	(−) 3,816
Total imports	1,108,956	185,889	719,443	(+) 78,063	(+) 21,950	(+) 32,421
Dutiable goods	710,050	150,054	416,047	(+) 50,153	(+) 15,083	(+) 23,382
Free goods	398,906	35,835	303,396	(+) 27,910	(+) 6,867	(+) 9,039

ONE HUNDRED COMMODITIES IMPORTED INTO CANADA, 1927-28

NOTES.—Commodities arranged in order of importance; Value in thousands of dollars.

Rank		Commodity	Total Imports 1927-28	Imports from		Increase (+) or Decrease (−) 1927-28 compared with 1926-27		
1927	1928			United Kingdom	United States	Total	United Kingdom	United States
1	1	Coal (except for ships' stores)	58,270	6,688	51,502	(−) 3,849	(+) 4,973	(−) 8,304
2	2	Machinery	48,601	5,104	42,343	(+) 7,519	(+) 769	(+) 6,633
6	3	Spirits and wines	45,471	38,370	7	(+) 16,492	(+) 13,141	(−) 3
3	4	Crude petroleum (except for ships' stores)	34,126	22	21,461	(−) 2,364	(+) 22	(−) 7,948
7	5	Automobiles	34,422	399	34,107	(+) 7,339	(+) 37	(+) 7,315
4	6	Raw sugar	33,267	.....	384	(−) 2,109	.....	(−) 716
5	7	Automobile parts	33,237	92	33,104	(+) 2,901	(+) 23	(+) 2,909
13	8	Farm implements	29,636	198	29,133	(+) 10,690	(+) 64	(+) 10,639
11	9	Green fruits	24,859	103	23,795	(+) 3,572	(+) 23	(+) 3,395
12	10	Raw cotton	24,640	11	24,629	(+) 4,469	(+) 11	(+) 4,466
8	11	Plates and sheets (iron)	22,400	3,828	18,175	(−) 1,685	(+) 2,469	(−) 2,377
9	12	Raw rubber	21,337	60	19,292	(−) 976	(+) 7	(−) 1,064
10	13	Silk fabrics and velvets	19,862	1,518	2,350	(−) 1,480	(−) 250	(−) 434
14	14	Electric apparatus	19,044	1,740	16,762	(+) 2,112	(−) 67	(+) 2,166
15	15	Engines and boilers	17,007	965	15,928	(+) 2,085	(+) 190	(+) 1,855
18	16	Raw furs	16,496	1,196	12,208	(+) 3,261	(−) 76	(+) 2,655
17	17	Books and printed matter	14,832	2,182	11,955	(+) 1,091	(+) 190	(+) 841
27	18	Raw hides	14,141	128	10,185	(+) 5,084	(+) 34	(+) 3,093
16	19	Worsteds and serges	13,438	10,928	71	(−) 703	(−) 828	(−) 71
24	20	Corn	13,058	.....	6,772	(+) 2,147	.....	(−) 1,869
20	21	Tea	12,310	5,280	31	(+) 73	(−) 569	(−) 4
23	22	Paper	11,918	1,452	9,168	(+) 558	(+) 91	(+) 346
21	23	Vegetable oils	11,700	388	9,822	(+) 52	(−) 167	(+) 2,680
19	24	Gasoline	11,550	1	11,546	(−) 923	(+) 1	(−) 927
26	25	Wood manufactures	10,713	692	8,943	(+) 955	(+) 143	(+) 609
25	26	Planks and boards	10,504	23	10,407	(+) 475	(+) 11	(+) 448
22	27	Coloured or printed cottons	10,251	5,096	4,079	(−) 1,282	(−) 1,287	(−) 122
29	28	Clay and its products	9,662	3,909	3,831	(+) 1,072	(+) 382	(+) 402
31	29	Settlers' effects	9,192	1,171	7,744	(+) 1,394	(+) 24	(+) 1,410
32	30	Structural iron and steel	8,656	137	8,195	(+) 985	(+) 91	(+) 877
28	31	Glass and glassware	8,130	1,331	4,070	(−) 509	(−) 171	(+) 315
34	32	Jute cloth or canvas	7,863	2,057	985	(+) 972	(+) 506	(−) 230
33	33	Copper and its products	7,250	151	7,062	(+) 178	(−) 40	(+) 241
30	34	Bars and rails (iron)	7,198	876	5,646	(−) 1,151	(+) 49	(−) 963
35	35	Raw tobacco	7,019	30	5,595	(+) 546	(−) 21	(+) 424
38	36	Stone and its products	6,396	522	5,378	(+) 430	(−) 2	(+) 411
36	37	Woollen clothing	6,357	5,285	591	(−) 70	(−) 193	(+) 27
37	38	Dried fruits	6,312	408	4,456	(+) 240	(+) 125	(−) 543
65	39	Alumina	6,281	.....	6,239	(+) 2,646	(−) 1	(+) 2,605
47	40	Fresh vegetables	6,070	72	5,430	(+) 1,290	(+) 19	(+) 1,035
43	41	Leather, unmanufactured	5,960	1,501	4,398	(+) 826	(+) 773	(+) 44
39	42	Green coffee	5,667	627	16	(−) 9	(+) 312	(−) 12
44	43	Rubber manufactures	5,326	659	4,481	(+) 266	(+) 34	(+) 181
46	44	Brass and its products	5,154	527	4,264	(+) 158	(+) 11	(+) 76
49	45	Noils, tops and waste wool	5,131	4,380	323	(+) 475	(+) 444	(+) 148
40	46	Raw wool	5,128	2,849	886	(−) 528	(+) 419	(−) 895

ONE HUNDRED COMMODITIES IMPORTED INTO CANADA, 1927-28—*Concluded*

NOTES.—Commodities arranged in order of importance; Value in thousands of dollars

Rank 1927	Rank 1928	Commodity	Total Imports, 1927-28	Imports from United Kingdom	Imports from United States	Increase (+) or Decrease (−) 1927-28 compared with 1926-27 Total	Increase (+) or Decrease (−) United Kingdom	Increase (+) or Decrease (−) United States
59	47	Raw silk	5,074	2	3,856	(+) 1,008	.....	(+) 324
52	48	Nuts (except cocoanuts)	4,676	120	1,550	(+) 319	(−) 8	(−) 79
50	49	Paints and varnishes	5,014	771	3,328	(+) 408	(+) 47	(+) 212
41	50	Coke	4,810	107	4,594	(−) 728	(+) 102	(−) 777
69	51	Cocoa and chocolate	4,789	720	957	(+) 1,368	(−) 16	(+) 135
42	52	Band or hoop iron	4,615	473	3,878	(−) 563	(+) 21	(−) 688
51	53	Meats	4,586	310	3,609	(+) 24	(−) 126	(−) 119
56	54	Leather manufactures	4,558	1,336	2,446	(+) 456	(+) 32	(+) 345
55	55	Woollen yarns	4,356	4,110	31	(+) 238	(+) 272	(+) 2
48	56	Castings and forgings (iron)	4,296	597	3,694	(−) 468	(+) 264	(−) 724
45	57	Sisal and manila grass	4,255	49	3,829	(−) 776	(−) 30	(−) 397
70	58	Grey and White cottons	4,182	1,558	2,542	(+) 852	(+) 213	(+) 600
57	59	Scientific and educational equipment	4,147	269	3,466	(+) 71	(+) 49	(−) 25
66	60	Fertilizers	4,145	26	2,921	(+) 653	(−) 21	(+) 506
61	61	Hardware and cutlery	4,098	1,002	2,339	(+) 223	(−) 66	(+) 221
68	62	Containers (outside coverings)	4,088	1,646	1,380	(+) 619	(+) 279	(+) 149
63	63	Silk clothing	3,999	445	1,937	(+) 162	(+) 52	(+) 263
64	64	Dyeing and tanning materials	3,941	138	2,555	(+) 202	(−) 20	(+) 396
60	65	Tweeds	3,772	3,286	25	(−) 258	(−) 471	(+) 9
54	66	Goods returned within five years	3,772	472	3,002	(−) 481	(−) 738	(+) 562
62	67	Tubes and pipe (iron)	3,739	427	3,052	(−) 103	(+) 8	(−) 127
72	68	Post office parcels	3,410	486	2,923	(+) 225	(+) 37	(+) 196
53	69	Ships' stores	3,357	279	2,343	(−) 882	(+) 68	(−) 766
75	70	Wire of iron or steel	3,318	1,170	1,825	(+) 157	(+) 170	(−) 33
76	71	Clocks and watches	3,304	75	1,219	(+) 163	(+) 9	(+) 28
73	72	Hats and caps	3,215	1,439	947	(+) 46	(+) 49	(−) 155
74	73	Soda and soda compounds	3,181	727	2,241	(+) 18	(−) 42	(+) 22
81	74	Fish	3,097	220	968	(+) 471	(+) 38	(+) 73
80	75	Diamonds, unset	3,068	987	18	(+) 268	(−) 56	(−) 7
77	76	Medicinal preparations	3,036	909	1,447	(−) 72	(−) 199	(+) 30
84	77	Canned fruits	3,008	210	1,694	(+) 223	(−) 14	(+) 179
71	78	Tin in blocks	2,987	948	1,763	(−) 272	(−) 109	(+) 85
78	79	Sulphur	2,908	.....	2,903	(−) 97	.....	(−) 95
79	80	Iron ore	2,890	.....	2,227	(+) 55	.....	(−) 15
82	81	Cotton yarns	2,880	790	2,084	(+) 303	(+) 77	(+) 226
90	82	Carpets (wool)	2,806	1,326	188	(+) 625	(+) 74	(+) 33
88	83	Molasses	2,742	48	345	(+) 444	(−) 9	(−) 90
87	84	Animals, living	2,507	236	2,228	(+) 173	(+) 55	(+) 125
83	85	Musical instruments	2,378	89	1,897	(−) 158	(−) 34	(−) 138
91	86	Rice	2,358	10	562	(+) 242	(−) 84	(+) 295
58	87	Binder twine	2,295	56	866	(−) 1,781	(+) 26	(−) 1,793
67	88	Seeds	2,281	264	1,079	(−) 1,211	(+) 5	(−) 258
85	89	Cotton clothing	2,274	421	1,466	(−) 191	(+) 2	(−) 172
86	90	Cotton lace and embroidery	2,254	1,144	382	(−) 169	(−) 157	(−) 49
93	91	Toys and dolls	2,118	239	838	(+) 177	(+) 24	(+) 82
95	92	Pigs and ingots (iron)	2,052	364	1,364	(+) 418	(+) 124	(+) 282
96	93	Jewellery	1,858	131	1,145	(+) 383	(+) 22	(+) 118
92	94	Silk yarn, artificial	1,784	86	394	(−) 263	(−) 202	(+) 13
89	95	Dress goods to be dyed	1,567	868	.....	(−) 658	(−) 421	.....
94	96	Refined sugar	1,454	11	170	(+) 202	(+) 1	(−) 61
99	97	Canned vegetables	1,441	4	840	(+) 222	(+) 4	(+) 119
98	98	Rods of iron and steel	1,198	16	333	(−) 212	(+) 16	(−) 96
100	99	Soap	1,178	148	893	(−) 27	(+) 11	(−) 28
97	100	Hemp	1,106	.....	1,075	(−) 353	.....	(−) 254
		Total value of above commodities	918,064	144,521	603,317	(+) 66,410	(+) 21,044	(+) 30,448
		Total Value of Imports	1,108,956	185,889	719,443	(+) 78,063	(+) 21,950	(+) 32,421
		Percentage represented by above commodities	82·8	77·7	83·8			

Canada's Export Trade, 1927-28

Canada's domestic exports for 1928 compared with 1927 show a decrease of $23,950,000. Five of the main groups show decreases and four increases. The Agricultural and Vegetable Products group decreased from $574,994,000 to $555,110,000 or $19,884,000. (The principal decreases occurred in the following items: sugar, $8,855,000; wheat flour, $8,841,000; oats, $4,324,000; barley, $2,402,000; seeds, $2,187,000; vegetables, $1,867,000; and hay, $1,562,000; while the following items show increases: rye, $4,599,000; alcoholic beverages, $2,449,000; and rubber products, $1,931,000.) The Animals and Animal Products group decreased from $167,291,000 to $165,845,000 or $1,446,000. (The chief items to show decreases were: meats, $4,937,000; cheese, $3,855,000;

butter, $2,298,000; swine, $1,586,000; fish, $980,000; milk and cream (fresh), $900,000; and eggs, $476,000; while the following show increases; raw hides, $4,655,000; furs, $3,706,000; unmanufactured leather, $2,821,000; and cattle, $2,298,000.) The Fibres and Textile Products group increased from $7,665,000 to $10,904,000 or $3,239,000. (The chief commodities to show increases under this group were: raw wool, $1,611,000; artificial silk, $517,000; binder twine, $427,000; and cotton products, $379,000.) The Wood, Wood Products and Paper group increased from $284,120,000 to $284,543,000 or $423,000. (Paper under this group, chiefly newsprint, increased $11,763,000; books and printed matter, $112,000; while unmanufactured wood (principally laths, planks and boards and shingles) decreased $8,485,000; and manufactured woods (largely woodpulp), $2,967,000.) The Iron and Its Products group decreased from $74,285,000 to $62,754,000 or $11,531,000. (The chief decreases were: automobiles, $6,910,000; automobile parts, $2,098,000; farm implements, $1,770,000; while machinery increased $1,411,000.) The Non-Ferrous Metals Products group increased from $80,639,000 to $90,840,000 or $10,201,000. (The main increases under this group were: aluminium in bars, blocks, etc., $5,474,000; nickel, $4,105,000; raw gold, $2,182,000; copper, $676,000; while lead decreased $1,583,000; and silver, $1,114,000.) The Non-Metallic Mineral Products group decreased from $28,510,000 to $25,281,000 or $3,229,000. (The chief commodity to show decrease was coal, which decreased $2,441,000.) The Chemical and Allied Products group increased from $16,575,000 to $17,893,000 or $1,318,000. (The chief increases occurred in fertilizers, which increased $801,000; and acids, which increased $690,000.) The Miscellaneous Commodities group decreased from $18,077,000 to $15,036,000 or $3,041,000. (The export of films under this group decreased $1,562,000; settlers' effects, $1,197,000; and cameras, $637,000.)

The decrease in Canada's exports 1928 compared with 1927 was due entirely to lower average export prices. The statistics in the following table clearly demonstrate that if the average export price in 1928 for certain staple products had been the same as in 1927, the Dominion's exports in 1928 would have been $20,354,000 greater (instead of $23,950,000 less) than in 1927.

Commodity	Declared Values Fiscal Year 1928	Based on 1927 Average Values	Increase
	$	$	$
Wheat	352,117,000	379,268,000	27,151,000
Wheat flour	59,879,000	63,570,000	3,691,000
Rubber tires	20,274,000	23,834,000	3,560,000
Planks and boards	55,398,000	57,485,000	2,087,000
Potatoes	7,339,000	9,046,000	1,707,000
Copper ore	7,083,000	8,781,000	1,698,000
Cattle	13,877,000	15,140,000	1,263,000
Aluminium in bars, etc	10,822,000	11,961,000	1,139,000
Newsprint paper	128,507,000	129,524,000	1,017,000
Bacon and hams	11,941,000	12,932,000	991,000
Total above commodities	667,237,000	711,541,000	44,304,000

For further details respecting Canada's exports in 1928 see the following tables: "Canada's Domestic Exports, by Main Groups, 1927-28," and "Seventy Leading Canadian Commodities Exported from Canada, 1927-28."

CANADA'S DOMESTIC EXPORTS, BY MAIN GROUPS, 1927-28

NOTE: Values in Thousands of Dollars

Main Groups	Total Domestic Exports 1927-28	Exports to		Increase (+) or Decrease (−) 1927-28 compared with 1926-27		
		United Kingdom	United States	Total	United Kingdom	United States
Agricultural and Vegetable Products	555,111	310,219	56,091	(−) 19,884	(−) 19,851	(−) 3,866
Animal Products	165,845	48,683	92,244	(−) 1,446	(−) 19,136	(+) 16,924
Fibres and Textiles	10,904	1,897	4,922	(+) 3,239	(+) 1,037	(+) 1,471
Wood and Paper	284,543	17,171	238,986	(+) 423	(+) 1,336	(−) 3,033
Iron and Its Products	62,754	8,196	8,831	(−) 11,531	(+) 66	(−) 1,849
Non-Ferrous Metals	90,841	15,697	44,114	(+) 10,201	(+) 1,522	(+) 5,107
Non-Metallic Minerals	25,281	1,934	15,510	(−) 3,229	(−) 391	(−) 1,742
Chemical Products	17,893	4,234	8,678	(+) 1,318	(+) 667	(+) 586
Miscellaneous	15,036	2,669	8,630	(−) 3,041	(−) 1,423	(−) 2,014
Total exports (domestic)	1,228,208	410,700	478,006	(−) 23,950	(−) 36,173	(+) 11,584
Foreign exports	22,248	2,072	18,641	(+) 6,833	(+) 926	(+) 5,728
Total exports	1,250,456	412,772	496,647	(−) 17,117	(−) 35,247	(+) 17,312

SEVENTY LEADING CANADIAN COMMODITIES EXPORTED FROM CANADA, 1927-28.

NOTES: Commodities arranged in order of importance; Values in thousands of dollars.

Rank		Commodity	Total Domestic Exports, 1927-28	Exports to—		Increase (+) or Decrease (−) 1927-28 compared with 1926-27		
1927	1928			United Kingdom	United States	Total	United Kingdom	United States
1	1	Wheat	352,117	244,816	9,504	(−) 978	(−) 7,091	(−) 1,674
2	2	Printing paper	129,226	2,918	118,406	(+) 12,233	(+) 1,554	(+) 10,041
3	3	Wheat flour	59,879	20,247	46	(−) 8,841	(−) 4,368	(−) 38
4	4	Planks and boards	55,398	7,461	42,520	(−) 4,397	(+) 888	(−) 5,732
5	5	Wood pulp	47,261	3,093	37,815	(−) 2,627	(−) 334	(−) 3,326
6	6	Fish	33,519	5,417	13,821	(−) 980	(−) 120	(−) 650
7	7	Automobiles	24,841	4,718	87	(−) 6,910	(+) 814	(+) 24
8	8	Meats	24,472	11,742	11,289	(−) 4,937	(−) 8,884	(+) 4,045
11	9	Raw furs	24,023	9,149	14,168	(+) 3,738	(+) 1,916	(+) 1,417
9	10	Barley	23,473	15,330	8	(−) 2,402	(−) 808	(+) 5
12	11	Whiskey	21,485	124	18,380	(+) 2,772	(−) 24	(+) 2,231
10	12	Cheese	21,101	17,828	2,444	(−) 3,855	(−) 3,841	(+) 30
13	13	Rubber tires	20,274	3,751	27	(+) 1,708	(+) 200	(−) 71
20	14	Nickel	17,026	5,785	7,132	(+) 4,105	(+) 1,643	(+) 1,135
14	15	Farm implements	15,643	639	3,523	(−) 1,770	(−) 35	(−) 682
15	16	Pulp wood	15,183	.....	15,183	(−) 217	.....	(−) 217
17	17	Copper, ore and blister	14,512	1,771	12,691	(+) 658	(+) 564	(+) 44
21	18	Cattle	13,877	130	13,527	(+) 2,298	(−) 6,210	(+) 8,512
18	19	Lead	11,881	4,256	347	(−) 1,583	(−) 1,135	(−) 171
19	20	Silver ore and bullion	11,862	14	4,499	(−) 1,114	(−) 284	(−) 1,289
31	21	Raw hides	11,714	.....	11,417	(+) 4,655	(−) 35	(+) 4,630
29	22	Leather, unmanufactured	11,186	2,453	8,223	(+) 2,821	(+) 1,023	(+) 1,652
38	23	Aluminium in bars	10,822	846	7,919	(+) 5,474	(+) 754	(+) 3,712
22	24	Asbestos, raw	10,677	823	6,535	(+) 62	(+) 121	(−) 443
35	25	Rye	10,649	4,505	1	(+) 4,599	(−) 487	(−) 3
33	26	Raw gold	9,036	1	8,990	(+) 2,182	(−) 17	(+) 2,154
27	27	Zinc	8,119	1,218	110	(−) 326	(−) 969	(−) 239
25	28	Milk and cream, fresh	7,841	1	7,840	(−) 900	(+) 1	(−) 900
23	29	Potatoes	7,339	.....	4,593	(−) 2,378	.....	(−) 2,080
28	30	Shingles (wood)	6,820	2	6,713	(−) 1,596	.....	(−) 1,611
24	31	Laths, (wood)	6,499	.....	6,470	(−) 1,498	.....	(−) 2,450
34	32	Rubber boots and shoes	6,348	2,354	2	(−) 27	(−) 110	.....
16	33	Sugar, refined	6,261	2,728	38	(−) 8,855	(−) 6,034	(−) 68
40	34	Machinery	6,167	1,350	305	(+) 1,411	(+) 244	(−) 151
32	35	Settlers' effects	5,798	371	5,148	(−) 1,197	(−) 35	(−) 1,090
44	36	Fertilizers	5,414	.....	4,776	(+) 801	.....	(+) 1,093
36	37	Malt liquors	5,401	.....	5,376	(−) 153	.....	(−) 149
41	38	Logs (wood)	4,984	98	3,096	(+) 237	(−) 16	(+) 455
30	39	Coal	4,746	216	2,115	(−) 2,441	(−) 702	(−) 31
37	40	Flaxseed	4,297	4	4,291	(−) 1,075	(+) 4	(−) 1,081
26	41	Oats	4,275	1,395	502	(−) 4,324	(−) 2,279	(+) 246
42	42	Apples, green	4,244	3,568	282	(−) 426	(−) 624	(+) 115
45	43	Milk, condensed	3,990	1,138	521	(−) 547	(−) 85	(−) 498
47	44	Soda and soda compounds	3,666	.....	1,363	(+) 65	.....	(−) 308
39	45	Films	3,542	1,341	1,408	(−) 1,562	(−) 805	(−) 863
51	46	Poles (wood)	3,330	.....	3,326	(+) 7	.....	(+) 28
56	47	Acids	3,330	2,235	1,030	(+) 690	(+) 479	(+) 192

SEVENTY LEADING CANADIAN COMMODITIES EXPORTED FROM CANADA, 1927-28—*Concluded*

NOTES: Commodities arranged in order of importance; Values in thousands of dollars

Rank 1927	Rank 1928	Commodity	Total Domestic Exports, 1927-28	Exports to— United Kingdom	Exports to— United States	Increase (+) or Decrease (−) 1927-28 compared with 1926-27 Total	United Kingdom	United States
55	48	Square timber	3,207	424	220	(+) 547	(+) 24	(−) 68
67	49	Raw wool	3,150	720	2,352	(+) 1,611	(+) 619	(+) 936
48	50	Hardware and cutlery	2,885	502	137	(−) 496	(−) 26	(+) 2
54	51	Abrasives, artificial, crude	2,821	183	2,505	(+) 143	(+) 147	(−) 137
61	52	Bran and shorts	2,750	9	2,626	(+) 732	(+) 7	(+) 720
50	53	Ferro-manganese and ferro silicon	2,738	.....	2,726	(−) 613	.....	(−) 609
46	54	Clover seed	2,702	396	1,997	(−) 1,059	(−) 103	(−) 1,045
53	55	Paper board	2,658	840	1,428	(−) 77	(−) 81	(−) 25
43	56	Automobile parts	2,567	84	69	(−) 2,098	(−) 343	(−) 225
57	57	Raw tobacco	2,216	2,212	2	(−) 353	(−) 351	(−) 1
62	58	Cereal foods	2,059	2,022	3	(+) 164	(+) 180	(−) 3
65	59	Binder twine	2,053	12	823	(+) 427	(−) 79	(+) 392
58	60	Rolling mill products	1,894	61	159	(−) 437	(−) 146	(−) 33
63	61	Electric apparatus	1,849	292	98	(+) 151	(+) 166	(−) 10
66	62	Oatmeal	1,799	1,481	.....	(+) 175	(+) 77	(−) 17
59	63	Tubes and pipes	1,755	120	667	(−) 309	(−) 195	(+) 41
52	64	Hay	1,684	584	899	(−) 1,562	(+) 343	(−) 1,876
60	65	Wrapping paper	1,643	273	1	(−) 408	(−) 189	(−) 12
64	66	Musical instruments	1,272	49	221	(−) 376	(−) 1	(−) 102
49	67	Butter	1,045	15	101	(−) 2,298	(−) 2,191	(−) 6
70	68	Fish oils	993	.....	985	(−) 65	(−) 14	(+) 83
69	69	Crude petroleum	813	304	482	(−) 322	(−) 144	(−) 192
68	70	Aluminium manufactures	613	38	22	(−) 537	(−) 42	(−) 542
		Total value of above commodities	1,160,723	396,457	446,330	(−) 24,460	(−) 37,469	(+) 13,217
		Total value of exports (Canadian)	1,228,208	410,700	478,006	(−) 23,950	(−) 36,173	(+) 11,584
		Percentage represented by above commodities	94·4	96·5	93·3	.....	.....	.....

CANADA'S TRADE VIA THE UNITED STATES

Canada's imports from overseas countries via the United States in recent years have steadily declined, especially from the British Empire. There was a decrease in the imports via the United States during the fiscal year 1928 compared with 1927 of $643,626, the decrease from the British Empire amounting to $1,545,840, while those from foreign countries show an increase of $902,214. The appended table shows that imports from the United Kingdom via the United States from 1927 to 1928 increased from $728,001 to $773,694; from Other British Empire decreased from $3,832,540 to $2,241,007; while the imports from foreign countries increased from $8,200,679 to $9,102,893. The proportions were: United Kingdom, 1927, 0·41 per cent, 1928, 0·42 per cent; Other British Empire, 1927, 7·71 per cent, 1928, 3·55 per cent; and foreign countries, 1927, 6·3 per cent; 1928, 6·48 per cent.

IMPORTS INTO CANADA VIA THE UNITED STATES

Imports from	Years ended March 31 1925	1926	1927	1928
United Kingdom via United States	$ 554,532	1,853,066	728,001	773,694
Per cent of total imports from United Kingdom	0·4	1·1	0·41	0·42
Other British Empire via United States	$ 3,779,361	6,260,189	3,832,540	2,241,007
Per cent of total imports from Other British Empire	8·6	14·2	7·71	3·55
Foreign countries via United States	$ 7,281,781	6,106,030	8,200,679	9,102,893
Per cent of total imports from Foreign Countries	7·9	5·5	6·3	6·48
Total Imports via United States	$ 11,615,674	14,219,285	12,761,220	12,117,594
Per cent of total imports from Overseas countries	4·2	4·5	3·71	3·11

Exports from Canada to overseas countries via the United States continue to remain about stationary, the proportion for the past three fiscal years being: 39·2 per cent, 39·5 per cent, and 38·9 per cent. The statistics in the table below indicate that Canada's exports to overseas countries via the United States were: United Kingdom, 1927, $216,313,000; 1928, $201,785,000; Other British Empire, 1927, $23,549,000; 1928, $26,762,000; and foreign countries, 1927, $70,423,000; 1928, $63,060,000. The proportions were: United Kingdom, 1927, 48·4 per cent; 1928, 49·1 per cent; Other British Empire, 1927, 25·1 per cent; 1928, 30·2 per cent; and foreign countries, 1927, 28·7 per cent; 1928, 25·1 per cent.

EXPORTS FROM CANADA VIA THE UNITED STATES

Exports to	Year ended March 31			
	1925	1926	1927	1928
United Kingdom via United States	$ 173,556,264	237,327,986	216,313,069	201,784,594
Per cent of total exports to United Kingdom	43·7	46·6	48·4	49·1
Other British Empire via United States	$ 18,350,573	22,157,401	23,549,163	26,762,373
Per cent of total exports to Other British Empire	23·1	24·3	25·1	30·2
Foreign countries via United States	$ 65,452,730	70,466,599	70,422,646	63,060,434
Per cent of total exports to Foreign countries	36·9	29·1	28·7	25·1
Total exports via United States	$ 257,359,567	329,951,986	310,284,878	291,607,401
Per cent of total exports to overseas countries	39·3	39·2	39·5	38·9

Canada's Position in International Trade

Canada continues to improve her position in international trade. The statistics in the following table giving "Net Imports into Ten Leading Countries of the World" demonstrate that in imports she has made progress among the leading importing countries of the world. In 1913 Canada occupied eighth place in imports, being exceeded in value of imports by the United Kingdom, Germany, the United States, France, the Netherlands, Belgium, and Italy, but in 1927 she had advanced to fifth place, displacing the Netherlands, Belgium, and Italy.

NET IMPORTS INTO TEN LEADING COUNTRIES OF THE WORLD

Rank			Countries	Years ended December 31		
1913	1926	1927		1913	1926	1927
				$	$	$
1	1	1	United Kingdom	3,207,900,000	5,437,500,000	5,335,400,000
3	2	2	United States	1,756,900,000	4,333,900,000	4,077,900,000
2	3	3	Germany	2,563,300,000	2,368,300,000	3,366,100,000
4	4	4	France	1,625,300,000	1,928,800,000	2,071,800,000
8	7	5	Canada	659,100,000	993,000,000	1,066,700,000
7	6	6	Italy	703,600,000	1,015,200,000	1,049,000,000
5	8	7	Netherlands	1,575,000,000	978,700,000	1,022,400,000
13	5	8	Japan	363,300,000	1,085,700,000	995,400,000
9	9	9	British India	594,100,000	864,600,000	896,900,000
10	10	10	Argentina	406,600,000	793,700,000	826,800,000

In export trade Canada has made greater progress than in import trade, as the statistics in the following table showing "Domestic Exports from Ten Leading Countries of the World" indicate. In export trade, Canada in 1913 was in

tenth position, being exceeded by the United Kingdom, the United States, Germany, France, the Netherlands, British India, Belgium, Italy, and Argentina, but in 1927 she had moved up to fifth position, displacing the Netherlands, British India, Belgium, Italy, and Argentina.

DOMESTIC EXPORTS FROM TEN LEADING COUNTRIES OF THE WORLD

Rank			Countries	Years ended December 31		
1913	1926	1927		1913	1926	1927
				$	$	$
2	1	1	United States	2,448,300,000	4,711,500,000	4,758,300,000
1	2	2	United Kingdom	2,556,200,000	3,172,500,000	3,451,000,000
3	3	3	Germany	2,402,900,000	2,336,700,000	2,432,100,000
4	4	4	France	1,327,900,000	1,929,500,000	2,164,700,000
10	5	5	Canada	436,200,000	1,268,600,000	1,218,300,000
6	6	6	British India	781,900,000	1,188,500,000	1,162,400,000
9	8	7	Argentina	465,600,000	764,500,000	974,000 000
13	7	8	Japan	313,500,000	930,700,000	907,900,000
8	9	9	Italy	484,700,000	732,600,000	804,200,000
5	10	10	Netherlands	1,239,400,000	701,100,000	762,000 000

In respect to aggregate trade, it will be noted from the following table giving "Aggregate Trade of Ten Leading Countries of the World" that Canada occupied ninth position in 1913 but in 1927 (as in 1926) she occupied fifth position, being exceeded in value of aggregate trade by the United States, the United Kingdom, Germany, and France.

AGGREGATE TRADE OF TEN LEADING COUNTRIES OF THE WORLD

Rank			Countries	Years ending December 31		
1913	1926	1927		1913	1926	1927
				$	$	$
3	1	1	United States	4,205,200,000	9,045,400,000	8,836,200,000
1	2	2	United Kingdom	5,764,100,000	8,610,000,000	8,786,400,000
2	3	3	Germany	4,966,200,000	4,705,000,000	5,798,200,000
4	4	4	France	2,953,200,000	3,858,300,000	4,236,500,000
9	5	5	Canada	1,095,300,000	2,261,600,000	2,285,000,000
7	6	6	British India	1,376,000,000	2,053,100,000	2,059,300,000
12	7	7	Japan	676,800,000	2,016,400,000	1,903,300,000
8	8	8	Italy	1,188,300,000	1,747,800,000	1,853,200,000
10	10	9	Argentina	872,200,000	1,558,200,000	1,800,800,000
5	9	10	Netherlands	2,814,400,000	1,679,800,000	1,784,400,000

With reference to trade per capita, Canada has made a very creditable showing since 1913, as the following table giving "Per Capita Trade of Ten Leading Countries of the World" shows. In the year 1913 Canada occupied fifth place in imports per capita and in 1927 she occupied seventh place. In exports per capita Canada in 1913 occupied seventh place and in 1927 she had advanced to second place, New Zealand being in first place. In aggregate trade per capita Canada in 1913 occupied sixth place and in 1927 she had moved up to second place, New Zealand being in first place.

PER CAPITA TRADE OF TEN LEADING COUNTRIES OF THE WORLD

Rank 1913	Rank 1927	Countries	Years ending December 31 1913 Import Trade	1913 Export Trade	1913 Total Trade	1927 Import Trade	1927 Export Trade	1927 Total Trade
			$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
3	1	New Zealand	98 89	97 01	195 90	149 57	160 30	309 87
6	2	Canada	87 55	57 95	145 50	112 06	127 99	240 05
1	3	Netherlands	256 35	201 71	458 06	143 06	99 92	233 98
5	4	Australia	78 30	74 78	153 08	125 11	108 81	233 92
7	5	Denmark	75 08	61 55	136 63	120 35	111 86	232 21
4	6	Switzerland	97 99	70 25	168 24	124 73	98 43	223 16
2	7	Belgium	118 07	92 55	210 62	102 55	93 87	196 42
8	8	United Kingdom	69 68	55 52	125 20	117 97	76 30	194 27
10	9	Argentina	46 74	53 61	100 35	79 90	94 12	174 02
9	10	Norway	60 11	41 46	101 57	91 24	63 05	154 29

In 1913 Canada occupied seventeenth position among the principal commercial nations of the world with reference to visible trade balance as indicated in the following table showing "Trade Balances of Ten Leading Countries of the World". In 1913 Canada's trade balance was unfavourable to the extent of $222,900,000, or $29.61 per capita, but in 1927 she was in third position, with a favourable trade balance of $151,700,000. In 1927, as in 1913, the United States occupied first place and British India second in amount of favourable trade balance. Canada still leads the world, however, in favourable trade balance per capita, with Argentina a close second and New Zealand a good third. The standing is: Canada, $15.93; Argentina, $14.22; and New Zealand, $10.73.

TRADE BALANCES OF TEN LEADING COUNTRIES OF THE WORLD

NOTE.—Favourable balance marked (+); Unfavourable balance marked (−).

Rank 1913	Rank 1926	Rank 1927	Countries	Years ending December 31 1913 Amount	1913 Per Capita	1926 Amount	1926 Per Capita	1927 Amount	1927 Per Capita
				Million $	$ cts.	Million $	$ cts.	Million $	$ cts.
1	1	1	United States	(+) 691·4	(+) 7 13	(+) 377·6	(+) 3 22	(+) 680·4	(+) 5 74
2	2	2	British India	(+) 187·8	(+) 0 60	(+) 323·9	(+) 1 01	(+) 265·5	(+) 0 83
17	3	3	Canada	(−) 222·9	(−) 29 61	(+) 275·6	(+) 29 34	(+) 151·7	(+) 15 93
3	10	4	Argentina	(+) 59·0	(+) 6 78	(−) 29·3	(−) 2 83	(+) 147·2	(+) 14 22
18	6	5	France	(−) 297·4	(−) 7 51	(+) 0·6	(+) 0 02	(+) 92·9	(+) 2 28
6	4	6	Brazil	(−) 11·3	(−) 0 46	(+) 72·8	(+) 1 97	(+) 44·1	(+) 1 19
12	5	7	Union of South Africa	(−) 62·6	(−) 9 00	(+) 1·1	(+) 0 14	(+) 18·3	(+) 2 43
4	8	8	New Zealand	(−) 2·0	(−) 1 90	(−) 24·8	(−) 17 65	(+) 15·3	(+) 10 73
5	7	9	Sweden	(−) 7·9	(−) 1 41	(−) 20·3	(−) 3 36	(+) 9·8	(+) 1 61
8	9	10	Denmark	(−) 37·5	(−) 13 51	(−) 27·8	(−) 8 16	(−) 29·3	(−) 8 49

TOUR OF LATIN AMERICA

During the past year, by direction of the Honourable the Minister of Trade and Commerce, the undersigned made an extensive tour, embracing various Latin-American countries, the trip including Cuba, Mexico, Brazil, Argentina, Chile, Bolivia, Peru, Ecuador, and Panama, for the purpose of establishing more intimate and friendly relations between the various government departments having to do with foreign trade and the Department of Trade and Commerce.

The most friendly feelings were found to exist everywhere towards Canada, and a unanimous desire expressed in official circles and in the press to increase the trade and intercourse between them and the Dominion. In some of the countries mentioned, Canadian prestige of a high order is already firmly established by reason of banking, electrical, and other developments of Canadian capital. This should greatly assist and encourage Canadian exporters to pay more attention to these markets, which heretofore have been largely neglected.

The total imports of Latin America for the last year for which statistics from all are available, viz. 1926, amounted to $2,370,977,000. During the same year, according to Canadian statistics of exports, Canada exported $43,535,000, whereas for the fiscal year ending March 31, 1928, the exports from Canada to Latin America had fallen to $34,286,480.

The undersigned, however, from the great interest which is now evident in South America, believes there will be a very much better showing in the exports at the close of the fiscal year ending March 31, 1929.

RESULTS

The tour was fruitful of important results. A Trade Commissioner office is to be established in Lima, with jurisdiction in behalf of Canadian exporters over Peru, Bolivia, and Chile.

The Trade Commissioner in Buenos Aires was instructed to pay more frequent visits to Uruguay and Chile, and an Assistant Trade Commissioner was sent to Buenos Aires to assist Canadian trade in this extended territory.

The Trade Commissioner in Mexico City was sent on a special trip to Central America and is now visiting those countries.

The Trade Commissioner in Buenos Aires, who accompanied the undersigned in his tour, made an extensive study of the trade conditions in each country visited and is now contributing special reports, in the *Commercial Intelligence Journal*, with regard thereto.

Following the visit of the undersigned, the trade negotiations with Cuba, seeking a trade agreement between Canada and that country, which were in abeyance owing to a misunderstanding, were resumed by the Honourable the Minister of Finance for Canada thereafter, and successfully consummated.

An arrangement was made for the distribution of Canadian Government motion picture films in every country in South America south of the equator.

One of the largest of the Canadian chartered banks has opened branch offices in one country following the representations made to the undersigned by some of the highest Government officials. Such action, they stated, would be the most important step towards increasing the trade between Canada and the country concerned.

The Canadian National Steamships has inaugurated a new steamship service to Brazil, Uruguay, and Argentina, under subsidy by this Department, and negotiations are now under way for steamship services from Canadian Pacific ports to certain other Latin-American countries.

During the visit of the undersigned to certain Latin-American countries, an entire absence of Canadian news was strikingly evident, hence arrangements have been made with one of the best known world news distributing agencies to furnish, by mail at regular intervals and as occasion warrants, to at least 100 of the principal newspapers in South and Central America, Cuba and Mexico, a minimum of 50,000 words annually of Canadian news calculated to promote and maintain interest in Canada and Canadian commercial, financial and industrial activities. These letters are being furnished in the Spanish language. This service began upon the 1st of May of this year,

during which month four news letters were sent to 115 newspapers in Spanish, and also to a number of English papers published in Latin-American countries.

Special thanks are due for the very great kindness and courtesy shown the undersigned by the British Ambassador in the Argentine, the British Ministers in Mexico and Bolivia, and the Acting British Ministers in Cuba, Chile, Peru, Ecuador and Panama. In every case their kindness was unlimited, doing everything within their power to assist the undersigned in the objects of his tour.

To Major E. L. McColl, the Canadian Trade Commissioner in Buenos Aires, who accompanied the undersigned during the arduous tour, special thanks are also due. His assistance and zeal never faltered in, at times, trying circumstances. To Major McColl therefore should be given the credit of having contributed in a very large measure to the success of the mission.

Commercial Intelligence Service

The very nature of its work precludes the possibility of compiling a satisfactory or accurate resumé of the widespread activities of the Commercial Intelligence Service. It may suffice, however, to record that the year under review has been featured by a number of important changes in methods and personnel, with a consequent increase in efficiency and a corresponding effect upon the development of foreign markets.

While recognition of the value of the assistance which Trade Commissioners are rendering to Canadian manufacturers is more and more reflected in correspondence between the department, firms in the Dominion and importers abroad, practical evidence was secured as the result of a special effort to determine the amount of new business which had been influenced in their respective territories by the Trade Commissioners. Without indicating to what extent and in what way the inquiry was conducted, it may be stated that such surveys as were undertaken, both in Canada and abroad, showed a total of $6,339,000 of new business directly or indirectly traceable to our offices. Last year's appropriation for the Commercial Intelligence Service amounted to $425,000, so that for every dollar expended on the service last year, over $14 came back to Canada in the form of new business.

In putting forward a claim of this kind, it must be clearly borne in mind how impossible it is to indicate, by any method of investigation, what has been accomplished in the development of Canadian export trade through the aid of Trade Commissioners. The mere statement that a number of agencies have been established on the recommendation of or through the assistance of Trade Commissioners is simply an indication that business has been initiated, but it is difficult, if not impossible, to obtain details as to the developments that may take place. The part which the Trade Commissioner plays in such negotiations naturally ends when the arrangement is completed, and thereafter it is no part of his duty to canvass firms thus aided as to present results or future developments. Nevertheless, the total mentioned should be the more significant when it is realized that the figures have been, in most cases, furnished voluntarily by the firms, both Canadian and foreign, who have been thus assisted.

CHANGES AFFECTING PERSONNEL

With the object of having available Assistant Trade Commissioners in every office, whose training will enable them to fill new posts and vacancies as they occur, a larger number of Junior Trade Commissioners than has been

customary was secured through competitive examinations conducted by the Civil Service Commission. During the year eleven Junior Trade Commissioners were appointed, one of whom resigned. Eight of these have been assigned to overseas offices.

The record of appointments, promotions and transfers for the period under review may be briefly indicated as follows:—

O. M. Armstrong, appointed Junior Trade Commissioner, July 18, 1927, and assigned to Buenos Aires as Assistant Trade Commissioner, March 31, 1928.

C. S. Beck, appointed Junior Trade Commissioner, July 25, 1927; resigned March 31, 1928.

P. W. Cook, resigned as Trade Commissioner at Kingston, Jamaica, March 31, 1928.

V. E. Duclos, appointed Junior Trade Commissioner, July 18, 1927, and assigned to London as Assistant Trade Commissioner, March 31, 1928.

J. H. English, Assistant Trade Commissioner, New York, transferred on March 16 to Jamaica to take charge of Kingston office, pending resignation of P. W. Cook.

L. S. Glass, appointed Junior Trade Commissioner, April 1, 1927, and assigned to Bristol as Assistant Trade Commissioner December 3, 1927.

J. J. Guay, Assistant Trade Commissioner at Milan, Italy, promoted to Canadian Trade Commissioner, Milan, May 5, 1927, and transferred to Brussels, March 12, 1928.

G. R. Heasman, appointed Junior Trade Commissioner, July 12, 1927, and appointed as Assistant Trade Commissioner to Batavia, Java, March 31, 1928.

J. C. Macgillivray, Assistant Trade Commissioner, Hamburg, Germany, promoted to Trade Commissioner and transferred to Rotterdam, Holland, January 23, 1928.

A. B. Muddiman, Trade Commissioner at Rotterdam, Holland, transferred to Milan, Italy, January 23, 1928.

F. H. Palmer, Canadian Trade Commissioner, Milan, Italy, resigned from the Service on May 5, 1927.

M. B. Palmer, appointed Junior Trade Commissioner, December 14, 1927.

J. G. F. Speers, appointed Junior Trade Commissioner, March 1, 1928.

J. A. Strong, appointed Junior Trade Commissioner, April 1, 1927, and assigned to Liverpool, England, as Assistant Trade Commissioner, December 3, 1927.

L. J. H. Turcot, Junior Trade Commissioner, promoted to Assistant Trade Commissioner, Milan, Italy, November 2, 1927.

APPOINTMENT OF DIRECTOR

C. H. Payne, Secretary of the Commercial Intelligence Service, who had been acting as director since the resignation of W. McL. Clarke, December 31, 1926, was confirmed in that appointment August 1, 1927.

OFFICIAL VISITS OF TRADE COMMISSIONERS TO CANADA

In accordance with long-standing practice, Trade Commissioners in rotation are allowed, after four years' residence abroad, to return to Canada in order to renew their knowledge of industrial conditions and to impart at first hand to exporters with whom they have been in communication, or to manufacturers who are contemplating entering the export field, advice and detailed

information as to marketing conditions in their respective territories. Nine Trade Commissioners made business tours during the past fiscal year, visiting the larger towns and cities from Halifax to Vancouver. The average length of their stay in Canada is about four months.

The following table gives the names of the Trade Commissioners who returned for this purpose and the dates of their tours:—

James Cormack, Trinidad	March 21, 1926—June 23, 1927.
P. W. Cook, Kingston, Jamaica	April, 1927—July 16, 1927.
Frederic Hudd, New York City	May 2, 1927—June 30, 1927.
	October 18, 1927—November 6, 1927.
	November 18, 1927—December 13, 1927.
R. S. O'Meara, Batavia	June 15, 1927—October 28, 1927.
C. M. Croft, Auckland	July 23, 1927—November 16, 1927.
G. B. Johnson, Glasgow	August 21, 1927—December 19, 1927.
Harrison Watson, London	September 3, 1927—December 7, 1927.
Hercule Barré, Paris	October, 1927—December 2, 1927.
J. A. Langley, Kobe	November 19, 1927.
A. S. Bleakney, Rio de Janeiro	February 15, 1928.

NEW OFFICES

Although authorization was obtained for the opening of a new office in Cuba before the close of the preceding fiscal year, the post was not filled until August 27. It was considered desirable that Mr. James Cormack, formerly Trade Commissioner at Port of Spain, Trinidad, who was selected for the position, should have an opportunity of completing a tour of Canada and thereafter to visit Venezuela and Colombia.

It has also been decided to open a new office at Lima, Peru, to have supervision over Peru, Bolivia, and Ecuador. The appointment of the Trade Commissioner for this post is now under consideration.

ASSIGNMENT OF TERRITORY

In October the Rhine Valley, extending from Holland to Switzerland, was assigned to the Rotterdam office. Following the tour of the deputy minister and Mr E. L. McColl through South America, Peru, Ecuador and Bolivia were definitely assigned to the Buenos Aires office until such time as a Trade Commissioner should be appointed to have supervision over these three territories.

The Central American Republics which heretofore, with the exception of Guatemala, had not been visited by a Trade Commissioner, were allotted to the Mexico office, and Mr. C. Noel Wilde, Trade Commissioner to Mexico. will visit these new territories at an early date.

SPECIAL DUTIES

Yves Lamontagne, Trade Commissioner to Brussels, Belgium, has been loaned to the Egyptian Government for three years for special duties in connection with tariff and statistical work. He left Brussels for Cairo on November 5, 1927.

P. W. Cook, Trade Commissioner to Kingston, Jamaica, in September, 1927, conducted a special investigation in Cuba for the Department of Customs.

J. C. Macgillivray, while Assistant Trade Commissioner at Hamburg, Germany, and during the visit of Harrison Watson to Canada, was transferred to London to take charge of the office there.

ADVERTISING CANADA ON STEAMSHIPS

The experiment of furnishing steamship lines, operating from Canadian ports and also from New York, with a framed notice to be placed on vessels directing attention to the assistance which could be afforded by Canadian Trade Commissioners abroad, was repeated. The following steamship lines are now carrying notices on their vessels: White Star Line Canadian Service (5); Robert Reford Company (7); Canadian Pacific Steamships (18); Canadian Australasian Royal Mail (2); Royal Mail Steam Packet Company (6); the Grace Line (4); Lamport and Holt (4); South American Steamship Company (2).

TRAVELLING INSPECTOR OF TRADE COMMISSIONER OFFICES

A. E. Bryan, Travelling Inspector of Trade Commissioner Offices, continued the round of inspection commenced the preceding year by visits to the offices at Mexico City, Rio de Janeiro, Buenos Aires, Port of Spain and Jamaica, which occupied in all seven months.

CANADIAN TRADE INDEX

For several years an allotment of 2,500 copies of the Canadian Trade Index has been purchased from the Canadian Manufacturers' Association, Toronto, for distribution, through Trade Commissioners, to British Consular Offices, Chambers of Commerce and leading importers. Last year the same distribution was made, but with better supervision in that the copies were accompanied by a personal letter or card from the Trade Commissioners suggesting that inquiries looking to the establishment of connections in Canada be referred to them.

VISITS OF CANADIAN TRADE OFFICIALS TO CANADA

It is pleasing to record the many expressions of appreciation received by the department from exporters for the frequent visits to Canadian plants of Canadian Trade Commissioners from abroad and Junior Trade Commissioners in training for foreign service.

A few years ago exporters were inclined to take the view that no little inconvenience was caused them by Canadian Trade Commissioners and other officials from the Department of Trade and Commerce so frequently calling upon them to obtain information with reference to their production, export methods, foreign fields, etc. The idea in some cases was that after going over the details with one Trade Commissioner, the information thus received should be made available to the others, which of course is not practicable.

The Trade Commissioner from Japan, for example, after visiting one plant, has not only gathered considerable information for himself, but can visualize the situation from recollections of a personal call far better than he could in any other way, when he returns to his post. It would, of course, be quite impracticable for him to pass on to all the other Trade Commissioners the information and impressions thus received.

Of recent years, however, gratifying evidence has been afforded on every hand by exporters, in their reception of Canadian Trade Commissioners or officials from the department, of their intense desire to throw open their doors to them and give them every possible information and assistance. An interest has been created which did not exist before; difficulties have been smoothed out and the foreign situation from many parts of the world has been brought personally to the attention of the chief executives of the respective plants, and

this has been of immense value. Many Chambers of Commerce and Boards of Trade, the Canadian Manufacturers' Association and other trade associations, have been of great assistance to the department also in welcoming officials from the department and assisting them to meet local exporters.

The World's Customs Tariffs

Tariffs, commercial treaties, import and export prohibitions, customs formalities, and related conditions affecting international trade are subjects which were given a prominent place in the deliberations of the World Economic Conference held at Geneva, May 4 to 23, 1927. Reports prepared for the use of the Conference make a notable contribution to the literature on tariff problems of the present time.

The conference consisted of 194 members attended by 157 experts, drawn from 50 countries. It placed on record recommendations respecting tariffs and allied subjects with a view to facilitating exchange of goods between countries through lessening of artificial trade barriers. Effect can be given to these recommendations only by the action of individual states and the negotiation of treaties.

After the lapse of nearly a year from the meeting of the Conference the following reference to the world tariff situation was made (April 26, 1928) in the British House of Commons by the Parliamentary Secretary, Overseas Trade Department:—

> Reductions of customs duties of varying magnitude have been effected since the Economic Conference, mainly as the result of the conclusion of tariff treaties, in Czechoslovakia, Germany, Greece, Hungary, the Serb-Croat-Slovene Kingdom, Switzerland, and Turkey. On the other hand, tariff increases covering a wide range of goods have been brought into operation in France, Chile, Salvador, and Poland. Tariff increases of a less extensive character have taken place in Italy and Portugal. In Austria, Cuba, and Belgium there have been changes in both directions. In most countries there have been no changes of duty of importance.

Through the operation of most-favoured-nation clauses in treaties, specific reductions in duty granted by one country to another usually have wide application and on this account tariff modifications in Europe in consequence of treaties have been extensive during 1927-28.

Even a summary of the world's tariff changes would be too voluminous for the present review, but the tariff and treaty developments in a few countries of some special interest to Canada may be mentioned.

TARIFF CHANGES IN VARIOUS COUNTRIES

France.—A comprehensive measure of tariff revision was made public in France in March, 1927. It was referred to the Customs Commission of the Chamber of Deputies and was much discussed but not carried to the final stage of a tariff law. A law, however, was promulgated on July 29, 1927, authorizing the Government to amend the tariff by decree to an extent necessary for the urgent conclusion of commercial treaties. With this law in view, France entered into a commercial agreement with Germany on August 17 which was an outstanding event of the world's tariff activities during the period under review.

A French decree increasing duties on numerous items and the Franco-German treaty both went into operation as from September 6, 1927. In consequence of the decree many intermediate rates (the pre-1921 general tariff) which applied to Canada and the United States lapsed. In consequence of this development, the United States was placed under the new general tariff for many products. Canada, on the items affected, was granted reductions from the general tariff in pursuance of the Franco-Canadian convention of commerce. After some Franco-American negotiations, a French decree of November 15,

1927, restored in a modified way the former concessions to the United States. Canada, through her convention with France, was also given the benefit of this decree wherever its rates were lower than those already in force.

In connection with new treaty arrangements with Italy, Belgium and Switzerland, a French decree was issued on March 2, 1928, effective on March 16, revising many rates of duty. This was accompanied by another decree adjusting duties applicable to Canada and the United States.

Czechoslovakia.—A convention of commerce between Canada (subject to approval by Parliament) and Czechoslovakia (subject to approval by the competent authority) was signed at Ottawa on March 15, 1928. It is to come into force fifteen days after exchange of final ratifications. The convention is binding for four years and thereafter until terminated upon one of the parties giving a year's notice. Under this convention the two countries are to accord each other most-favoured-nation treatment in tariff matters.

When the present Cezchoslovakia formed part of the old Austria-Hungary, Canada under a British treaty (1876) exchanged most-favoured-nation treatment with that whole territory. The British treaty and the tariff relationship that it established ended automatically in 1914 with the outbreak of war.

Czechoslovakia, on becoming an independent state at the close of the war, adopted (1919) the old tariff of Austria modifying it extensively in subsequent years. There is now in force in Czechoslovakia a general tariff, a schedule of reduced duties on 54 items, as well as many conventional rates resulting from commercial treaties. A Canadian-Czechoslovakian agreement, effective from September 6, 1926, to the end of that year, gave Canada the special schedule of 54 items. A second agreement, also temporary, was brought into force as from January 1, 1927, which guaranteed to Canada most-favoured-nation treatment on 71 Czechoslovakian tariff items. In consequence of this agreement the reduced rates on any of the 54 items, not otherwise included in the agreement, were left in operation as regards Canadian goods. In return, Canada granted Czechoslovakia her intermediate tariff. This is the arrangement which is to be superseded by the 1928 convention, establishing full most-favoured-nation treatment on a reciprocal basis.

Cuba.—A new Cuban tariff law went into force on October 26, 1927, establishing two columns of duties, maximum and minimum, in addition to the preferential schedule applicable since 1903 to the United States. Formerly, Cuba had only one schedule of duties outside of the United States preferences. The maximum tariff is double the minimum. The Executive of the State are authorized, upon recommendation of the Technical Tariff Commission, to apply the maximum tariff wholly or in part, or intermediate rates, to merchandise from non-treaty countries or from countries which do not accord Cuba most-favoured-nation treatment.

Canada and Cuba entered into an agreement whereby the Cuban minimum tariff (or general tariff as it is frequently termed) will apply to Canadian goods and the Canadian intermediate tariff to Cuban goods, imported direct. This arrangement, set forth in a Canadian Order in Council of November 22, 1927, is to remain in force one year from that date unless a permanent convention is concluded earlier.

United States.—Changes were made in the duty on some commodities under the flexible provisions of the United States Tariff Act of 1922 (section 315 of Title III), which gives the President power to increase or decrease rates up to 50 per cent. The duty on cheese of the Swiss or Emmenthaler type, by a proclamation effective July 8, 1927, was increased 50 per cent, making the rate 7½ cents per pound, but not to be less than 37½ per cent ad valorem. The

principal competing country was stated to be Switzerland. Cherries, sulphured or in brine, stemmed or pitted, were the subject of a proclamation effective from January 2, 1928, whereby duty was increased from 2 to 3 cents per pound. In this case Italy was the principal competing country. The duty was reduced from 40 per cent ad valorem and 7 cents per pound to 20 per cent ad valorem and 3½ cents per pound on cresylic acid (effective from August 19, 1927) and phenol (effective from November 30, 1927). Going into operation on December 10, 1927, the duty on crude magnesite and caustic calcined magnesite was increased by 50 per cent, making the rates about 47 and 94 cents respectively per 100 pounds. Another proclamation, operative from March 14, 1928, declared that certain cotton rugs should be dutiable at 35 per cent ad valorem, American selling price, instead of 35 per cent levied on the usual basis of foreign value or the export value.

British West Indies.—April 30, 1927, was proclaimed as the date for formally bringing into force new tariff preferences (bananas excepted) to be exchanged between Canada and the British West Indies, Bermuda, British Guiana and British Honduras under the 1925 trade agreement. The preference to be granted by Canada on bananas is not to take effect before the establishment of certain steamship service as provided for in Article XIII of the agreement. Otherwise the new Canadian concessions were in effect since 1926.

Some of the colonies had enacted tariffs also affording increased preferences (details in last annual report) before the formal proclamation was made. The preferences in the colonies became operative as follows: Bermuda, July 15, 1926; Bahamas, September 4, 1926; British Guiana, March 19, 1927; Jamaica, March 31, 1927; Trinidad, April 29, 1927; Barbados, April 30, 1927. The Leeward and Windward Islands, which were bound only to endeavour to grant some larger preferences, have done so to an appreciable degree. The general preference to be granted in British Honduras is to be not less than 33⅓ per cent with 50 per cent on a specified list of products. British Honduras has been granting Canada a 50 per cent preference on practically all dutiable goods under both the former and present agreements.

Australia.—An Australian tariff amendment introduced November 24, 1927, affected 135 items or parts of items. The measure was described as an adjustment of the tariff, there being both increases and decreases in duty as well as changes to rectify anomalies. Further alterations were later proposed. The tariff as amended received final assent on March 31, 1928. Textile gloves (item 113-B), one of the items on which Canada enjoys the British preference, were made free of duty under the British preferential tariff, instead of 10 per cent ad valorem, while the general tariff remained at 25 per cent ad valorem. Motor car chassis, upon which Canada is accorded the Australian intermediate tariff, were subjected to a 5 per cent ad valorem increase in duty under both the intermediate and general tariffs, the British preferential remaining unaltered.

In the case of many Australian deferred duties, when the proposed date of enforcement arrived, the operation of the duties was in nearly all cases further deferred. In the annual report of the Tariff Board (June 30, 1927) it was stated that deferments were renewed because the industry concerned had not made such progress as to warrant imposition of the proposed duties.

New Zealand.—New Zealand customs resolutions effective from September 14, 1927, and finally passed on October 25, 1927, established a new tariff. The report of the Tariff Commission which preceded the revision stated that the principle of according tariff preference to goods of Empire origin was a fundamental feature of New Zealand policy. To a large extent higher rates were

imposed on foreign goods, while increases in the British preferential tariff were comparatively limited in number, resulting in an enlarged measure of preference for Empire products. Canada and New Zealand for many years have exchanged their entire British preferential schedules, Canada also granting to New Zealand the benefits of the Australian trade agreement.

The intermediate tariff column, adopted first in 1921, and never made operative, was dropped altogether. The new customs law therefore comprises only British preferential and general tariff schedules. The Tariff Commission had advised that more satisfactory than retention of the intermediate tariff would be negotiations with particular countries. An appendix to the tariff resolutions sets forth, for public information, proposed reduced duties on some commodities which are to be made subject-matters of negotiation for promotion of New Zealand external trade.

Great Britain.—A tariff change of interest to Canada was bringing rubber tires for motor vehicles, formerly duty free, under the same tariff as the vehicles, namely, 33·3 per cent general tariff and 22·2 per cent British preferential, effective from April 12, 1927.

Various Countries.—The following countries completely revised their tariffs, issuing new ones on the dates mentioned: Roumania (April 14, 1927); Ecuador (July 1, 1927); Norway (July 11, 1927; effective temporarily on May 15); Venezuela (July 20, 1927); Salvador (August 15, 1927; published in March); Bolivia (October 1, 1927); New Zealand (October 25, 1927); Cuba (October 26, 1927); Peru (January 2, 1928); Chile (February 27, 1928, for decreases; sixty days later for increases).

BRITISH MERCHANDISE MARKS ACT

The British Merchandise Marks Act, 1926, came into full operation on June 15, 1927. This date was fixed for enforcement of section 1, which prohibits the sale or exposure for sale in the United Kingdom of imported goods bearing marks which, without qualification, might be considered as indicating United Kingdom origin. The additional word " Empire " or " Foreign " or, alternatively, a definite indication of origin such as " Canadian Produce " or "Made in France" would be a satisfactory qualifying mark. Section 1 affects dealers in the United Kingdom who sell imported goods under their own labels, as such labels must bear these qualifying marks of origin.

Section 2 gives the Government power, after a hearing of interests concerned, to order the marking of origin on particular articles whether or not otherwise branded. Under this section an order of December 20, 1927, was made requiring that after three months imported woven labels, certain wire, brass water taps and other water fittings, cabinet furniture of metal, and castors bear a mark of origin at the time of sale or exposure for sale. The same order required that after six months imported rubber tires and tubes should bear an indication of origin both at the time of importation and sale. Many applications for compulsory marking on other goods were presented, affecting products of interest to Canada, including apples, and the usual investigations were ordered.

The Merchandise Marks Act of 1887, still in force, prohibits the importation of goods marked so as to suggest United Kingdom origin. On this account the name of the actual country of origin is often required on goods to counteract an otherwise misleading mark such as the name of a city in England.

Dominion Bureau of Statistics

The activities of the various branches of the Dominion Bureau of Statistics during the fiscal year 1927-28 may be briefly summarized as follows:—

POPULATION

The final reports of the census of the Prairie Provinces taken as of June 1, 1926, were issued, and some further compilations completed of the 1921 Census of Occupations, Wage-earners and Employment. Progress was made with Census monographs on Origins and the rural and urban distribution of the population. The Fifth Annual Report on the Vital Statistics of Canada (births, deaths, marriages), collected in co-operation with the Registrars-General of the several provinces, was issued, the registration area now including the whole of Canada. The immigration returns of the year compiled by this Branch in co-operation with the Department of Immigration showed an increase.

AGRICULTURE

The annual agricultural statistics collected in co-operation with the several provincial departments of agriculture, and the annual crop-reporting service likewise co-operatively operated, followed much the same lines as in preceding years. Under both headings the relative number of returns received was increased. The Monthly Bulletin of Agricultural Statistics presented the results of the foregoing services, as well as those of several special inquiries and investigations. The monthly and annual statistics of the Canadian grain trade and of the marketing of live stock and animal products, cold storage stocks, etc., previously carried out in the Internal Trade Branch of the Bureau, were transferred to the Agricultural Branch in September, 1927, and will in future be issued by the latter.

THE INDUSTRIAL CENSUS

The usual annual reports on the Canadian fisheries, fur farms, trapping operations, dairy factories and manufactured animal products in general were prepared, in the branch on animal products, preliminary bulletins in mimeograph being issued in anticipation of the printed reports. A monthly record of boot and shoe production is issued by this branch for the use primarily of the Shoe Manufacturers' Association of Canada.

In the branch on forestry and allied manufactures, annual reports on sawmilling and pulp and paper were issued, together with mimeographed reports on primary forest production and the various wood-using industries of the Dominion.

In the mining, metallurgical and chemical branch of the bureau, co-operation with each of the mineral-producing provinces was continued, and annual reports were published on mining production, the chemical industries, the manufactures based on iron and steel and the various manufactures based on the metallic and non-metallic minerals respectively. Monthly bulletins on coal and iron and steel were maintained, the statistics of coke being included in the former. In addition, some seventy-nine annual leaflets and bulletins were issued in this branch.

The branch on general manufactures issued, in addition to a general report on the manufactures of Canada and each of the provinces as a whole, some twenty-nine bulletins on various industries not included under the branches above designated. The Industrial Census, under sections 20-21 of the Statistics Act, covers on an annual basis all phases of production outside of agriculture.

EXTERNAL TRADE

From the beginning of the fiscal year a quarterly trade report was substituted for the previous monthly report in detail, a mimeograph service being instituted for the provision of statistics up to date on specific commodities; there is a considerable demand for the latter. The annual trade report was prepared along much the same lines as in the previous year, showing the largest volume of trade in the history of Canada. This report was preceded by a "condensed preliminary" report issued in May, which has met a widely expressed demand for early statistics, especially for data on the trade in principal commodities with the leading countries. A departure of the year which met with general approval was the issuing during February of a special report on the general trade of Canada for the preceding calendar year, 1927; this report followed the format of the quarterly report on trade, but contained the accumulated totals for each item for the calendar year.

INTERNAL TRADE

An analysis of the data collected by the recent postal census of trading establishments was completed, and progress made on a census monograph dealing with housing and rentals—also in the assembling of data relating to capital imports and exports and the balance of international payments. The work on general prices (including wholesale prices, retail prices, security prices, prices of "services," interest and exchange and import and export valuations) was continued with certain improvements in detail. The base year of these indexes is being changed from 1913 to 1926.

TRANSPORTATION AND PUBLIC UTILITIES

The regular monthly and annual reports on steam railways, electric railways, canals and central electric stations were maintained, and some progress made on the construction of an index number of freight rates.

JUDICIAL STATISTICS

The annual reports on criminal statistics and juvenile delinquency were issued, a "separate" on the latter phase of the subject being projected.

GENERAL

The *Canada Year Book* as a compendium and précis of general statistics was issued with several improvements in detail; this volume has now reached the definite form laid down some years ago, with the gradual completion of the organization of official statistics. The monthly review of business statistics, commenced in mimeograph form in January, 1926, now serves a considerable clientele, the paid subscription list being in excess of 1,550. The library of the Bureau of Statistics received the usual accessions during the year, being maintained as an up-to-date reference library for statistical publications and works on statistical method throughout the world.

An incident of the year was the publication, in connection with the celebration of the Diamond Jubilee of Confederation of an illustrated booklet entitled *Sixty Years of Canadian Progress*. The circulation of this booklet was largely effected through the committee on the celebration, reaching the large total of 180,000 copies.

Exhibition Commission

The Exhibition Commission of the Department of Immigration and Colonization was transferred to the Department of Trade and Commerce on December 1, 1927, and since that date has been administered by this department.

Since the creation of the Exhibition Commission of 1902, all exhibition work has been directed from the headquarters in Ottawa. This necessitated shipping exhibits backwards and forwards from Canada to the United Kingdom and Europe, where most of the exhibitions in which Canada participates have been held, every time an exhibition of any importance was held, and also transferring a staff from Ottawa abroad to look after the construction of building, preparing the exhibits, and so forth.

After careful consideration therefore, it was decided, in view of the extended exhibition work now contemplated—especially in the United Kingdom, and other large prospective exhibitions on the Continent of Europe—to transfer all the exhibition material stored in Ottawa, together with the greater portion of the staff, to London, Eng., for the purpose of enabling the department to carry on continuous exhibition work in the United Kingdom. It was also decided, for the present year at least, in view of the organization of the Exhibition Commission in England, and also of the large number of fairs and exhibitions which will take place in the British Isles, that Canada should not participate in any large fairs elsewhere, as the whole time of the Exhibition Commission now in London is fully taken up in making exhibits on behalf of Canada throughout the British Isles.

With a view to carrying out these proposals, an appropriation was passed at the recent session of Parliament for $75,000 for the erection of a warehouse in London, England, in which would be provided cold storage space where fruit, dairy produce and other perishable goods can be stored and thus be available for display at any time.

This warehouse has been designed to do speedy work with the efficiency and economy so essential to exhibition work. The building—which will be under construction very shortly—will be equipped with wood-working machinery, paint shop, drafting room and so forth, and will serve as a distributing centre for shipping Canadian exhibition material to various exhibitions and fairs. While the initial expenditure may be heavy, it must eventually prove an economical move in view of the fact that the warehouse and storage place in Ottawa was costing in the vicinity of $9,500 per annum, while an additional warehouse was necessary in England for exhibition work heretofore, costing in the vicinity of $4,000 per annum.

Small warehousing premises have also been retained in Canada with a small staff in Winnipeg and St. Catharines, the former for the purpose of preparing grains and grasses for exhibition use, and the latter for processing and bottling fruits, vegetables and so forth, as well as building show-stands and panels for use at exhibitions in the United States.

Offices for the exhibition staff have been taken in London at British Columbia House, from whence, under the direction of Mr. J. O. Turcotte, Canadian Government Exhibition Commissioner, the work will be carried on for the department.

Arrangements have also been made through the Exhibition Branch of the department to continue the work hitherto done under the Department of Immigration and Colonization in the interest of immigration, and the sum of $100,000 has therefore been set aside out of the total appropriation for the fiscal year for exhibitions, amounting to $300,000. This will be used for the purpose of collecting and preparing, on behalf of the Department of Immigration and Coloni-

zation, samples of grain, grasses, vegetables, dairy produce and so forth for the usual exhibits and fairs which take place annually in the United States and Great Britain. This work is to be conducted in close co-operation with the principal officers of the two departments.

Since the arrival of the Exhibition Commission in England, Canada, has already been able to take part, in co-operation with the Empire Marketing Board, in the following exhibitions:—

Sheffield Ideal Homes Exhibition, Sheffield;
Grocers' and Allied Trades Exhibition, Manchester;
Olde Englysshe Fayre and Empire Exhibition, Alexandra Palace, London, N.;

at which very adequate displays of food products were shown.

During the current year Canada will be showing at the following:—

July 4-6.—Aldershot Command and District Horse Show. Canada will have a display of both natural resources and food products in a space of 3,000 square feet.

August 30 to September 12.—Bristol Annual Exhibition. At this exhibition Canada will have 800 square feet.

September 5-8.—National Show of Bees and Honey, Crystal Palace.

September 10-14.—Tobacco Trade Exhibition and Conference, Manchester. Canada will have at this exhibition a very good tobacco exhibit, which is now being prepared in Ottawa, and will show in co-operation with the Empire Marketing Board.

October 2-13.—Better Housing and Housekeeping Exhibition, Sheffield. Canada will have about 1,400 square feet, where food products will be shown.

October 30-November 8.—Bradford and District Grocers and Provision Dealers Exhibition. Canada will be showing in co-operation with the Empire Marketing Board.

October 30-November 10.—Empire Exhibition and Shopping Week, Cardiff. Canada has secured 2,600 square feet in addition to three or four of the most prominent shop windows in Cardiff during that week.

November 26-December 1.—31st Universal Food and Cookery Exhibition, Olympia, London. Canada will have about 2,000 square feet.

In addition to the above, there are under consideration many others and negotiations are being entered upon to secure space. Up to the present the Exhibition Branch has also been busily engaged in furnishing material for—and in many instances making displays of—Canadian products at more than seventy-five Empire fetes and bazaars. On these occasions all material has been returned to the Commission at the conclusion.

The commission is working in close co-operation with the Director of Publicity in Great Britain.

Motion Picture Bureau

The Director of the Motion Picture Bureau reports that the last fiscal year has been perhaps the most successful since its inception in 1917.

Pictorial publicity, especially the motion picture, as a propaganda and advertising force and as a factor in education, makes a universal appeal and is tremendous in its influence. The Motion Picture Bureau functions as the producer and distributor of motion and still pictorial matter of all kinds, designed to disseminate information throughout the world regarding Canada, its resources, attractions and opportunities, and to encourage development and the bringing in of tourists and settlers. The Bureau also acts as a central organization for the production of motion and still photographic material of a technical, informative and instructional nature, for all departments of the Federal Government and other affiliated organizations.

ACTIVITIES OF THE BUREAU

During the past fiscal year the volume of production and the amount of pictorial publicity placed in circulation has exceeded any previous year and the extent of the territory covered has been increased by nearly 40 per cent. As in

former years, close attention has been paid to the revenue-producing possibilities of the bureau, the revenue for the fiscal year under review amounting to $17,912.26, an increase of $2,783.18 over 1926-27. New revenue-producing distribution arrangements concluded during the past fiscal year are expected to substantially increase the revenue during the next fiscal year.

A clear idea of the expansion of the bureau may be gained by a comparison of its activities in the United States during the fiscal years 1926-27 and 1927-28. At the close of 1926-27, the bureau had in circulation in this territory slightly more than 450,000 feet of film, while at the end of 1927-28 this amount was almost 900,000 feet, a growth of approximately 100 per cent.

PRODUCTION AND DISTRIBUTION OF MOTION PICTURES:

"SEEING CANADA" SERIES

The bureau has, since a few years after its inception, specialized in the production of a series of one-reel films depicting Canada, its resources, attractions and opportunities, which have been circulated throughout the world, both theatrically and non-theatrically. From twelve to twenty of these subjects are produced each year.

The results achieved during the past fiscal year may be seen from the schedule below:—

Country	In Theatrical Circulation, either revenue-producing or sold outright	In Circulation theatrically and non-theatrically free
Australasia	150	
Austria and Jugo-Slavia	.....	10
British West Indies—		
Jamaica	.....	8
Trinidad	.....	8
China	.....	12
Cuba	.....	11
Great Britain	40	20
France	15	10
Germany	.....	16
Holland, Belgium and Scandinavian countries	32	10
India	.....	4
Italy	.....	6
Japan	4	10
Norway and Sweden	.....	9
South Africa	30	10
South America	34	13
United States	68	1,057
	373	1,214

The average length of these films is 800 feet, and therefore the amount of film in circulation throughout the world (exclusive of Canada) during the fiscal year was approximately 1,269,600 feet.

DISTRIBUTION IN CANADA

In Canada, the bureau's film productions are distributed through the theatrical circuits by the Canadian Universal Film Company, one of the Dominion's most important commercial motion picture concerns, and a considerable revenue is derived therefrom. Recently a contract has been entered

into with the Famous Players Canadian Corporation for the distribution of a series of films throughout their entire circuit, the largest and most important in Canada and covering the Dominion from coast to coast.

A vast amount of circulation is also secured in the non-theatrical and educational fields in Canada through the provincial Governments and through various educational, forestry, patriotic and sporting organizations, and through railway agents. The bureau maintains a special library of films at Ottawa for this purpose and the films are furnished at a nominal rental.

DISTRIBUTION IN UNITED STATES

Through the agency of several large commercial film organizations, the bureau secures a worth-while circulation in the theatres of the United States, which brings in some revenue. This field is now being further developed to secure a wider theatrical circulation and probably larger revenue.

In the non-theatrical and educational fields, the bureau, through thirty-five distribution agencies—many of which are national in their scope—has in circulation approximately 845,600 feet of film. During the fiscal year, special efforts were made to further develop this field, with the result that it has secured a volume of circulation more than 50 per cent greater than in the previous year, and covering a much wider territory than heretofore. At the present time the bureau has in constant use in the United States approximately 1,057 films and they are being screened in every state.

DISTRIBUTION IN BRITISH EMPIRE

In Australasia the distribution secured ranks very high. In the theatrical field it is made through what is perhaps the largest and most important commercial concern in these territories and a substantial revenue is derived therefrom, and in the non-theatrical and educational field it is being developed through Government agents and is making good progress.

In South Africa distribution is made practically throughout the entire sub-continent, in association with African Films Limited, the largest and most important theatre-operating concern in that territory. The non-theatrical circulation is considerable and is effected through government agencies.

In the British West Indies, and other sections of the Empire, free theatrical distribution and non-theatrical distribution is being secured with increasing volume by government trade and other agents.

DISTRIBUTION IN UNITED KINGDOM

Arrangements have been concluded for the extensive circulation of our films, both theatrically and non-theatrically, throughout the United Kingdom and the Irish Free State.

In the theatrical field, a contract has been entered into with one of the largest and most important British film distributing companies to handle twelve Canadian Government films (approximately ten copies of each) annually and a minimum of 300 to 400 theatrical bookings for each subject is assured. If the Government's application for registration under the Cinematograph Films Act, 1927, now pending before the Board of Trade, is granted, it is expected that the minimum number of bookings for each film will be increased to between 600 and 700. The British film organization with which the contract has been concluded operates ten branches or exchanges throughout the United Kingdom and the Irish Free State, thus assuring bookings in every part of this territory.

This new arrangement should go into effect during the coming season and will continue for a number of years, with renewal privileges, and be a source of considerable revenue to the Motion Picture Bureau.

In the non-theatrical field, extensive circulation has also been arranged. The Federation of British Industries have, through arrangements just concluded, undertaken to make available through their organization some twenty or thirty of our film subjects and have already placed them in their catalogue. During the next fiscal year, the number of films to be made available to the non-theatrical field through this means will be increased. Arrangements have also been made to place films at the disposal of the Empire Marketing Board, Film Section; the Imperial Institute; the Director of Publicity, Department of Trade and Commerce; the High Commissioner's Office; the various representatives of the Canadian and provincial Governments in the United Kingdom; the agencies of the Canadian National and Canadian Pacific Railways and other interested organizations and individuals, for non-theatrical exhibition, and it is expected that comprehensive and valuable circulation will be achieved through this means

Arrangements have also been concluded with a number of the most important topical and "magazine" film production and distribution organizations in the United Kingdom to supply them with material which, through their wide circulation, both theatrically and non-theatrically, not only in the United Kingdom but in certain countries of Europe, will have great publicity and advertising value.

DISTRIBUTION IN FOREIGN COUNTRIES

In South America, wide theatrical distribution is being secured, with prospects for the coming year of much greater circulation. Non-theatrically, considerable circulation is being secured through the co-operation of our Trade Commissioners and other agents.

In Holland, Belgium, and the Scandinavian countries considerable distribution in both the theatrical and non-theatrical fields has been and is being secured through a large commercial film company operating in these countries. Some non-theatrical distribution has been secured by our Trade Commissioners. In France, distribution theatrically is obtained through a large commercial film agency and non-theatrically through our trade and other agents and through educational organizations. In Germany, Italy, Austria, and Jugo-Slavia, though, owing to peculiar conditions existing in these states, considerable theatrical distribution has not been secured, a fair amount of non-theatrical distribution has been obtained through the efforts of our Trade Commissioners and other agents.

In the Far East, especially China and Japan, distribution, both theatrically and non-theatrically, is effected through the co-operation of our Trade Commissioners.

CO-OPERATIVE WORK WITH GOVERNMENTAL DEPARTMENTS AND ASSOCIATED ORGANIZATIONS

During the past fiscal year, the co-operative work with other Government departments, the Canadian National Railways, several of the provincial Governments, and with Dominion Government and railway representatives throughout the world, has largely exceeded that of any previous year.

Government departments and associated organizations for whom the bureau has produced motion picture and still photographic material, on a co-operative basis, during the fiscal year, include:—

Air Services, R.C.A.F.
Board of Pension Commissioners.
Canadian Legation, Washington, D.C.
Canadian Small Arms School.
Canadian War Graves Commission.
Canadian National Railways.
Canadian Pacific Railway.
Canadian Government Trade Commissioners.
Canadian Social Hygiene Council.
Canadian Clubs, Association of.
Central Experimental Farm (seventeen divisions).
Civil Service Commission.
Department of Agriculture (fourteen branches).
Department of Finance.
Department of Health and Soldiers' Civil Re-establishment.
Department of Immigration and Colonization.
Department of Insurance.
Department of the Interior (four branches).
Department of Labour.
Department of Marine and Fisheries (three branches).
Department of Mines (five branches).
Department of National Defence (six branches).
Department of Public Works.
Department of Railways and Canals.
Department of Secretary of State.
Department of Trade and Commerce (nine branches).
Dominion Archives.
Dominion-Provincial Conference.
Government of Canada.
Government of Alberta.
Government of British Columbia.
Government of New Brunswick.
Government of Nova Scotia.
Government of Ontario.
Government of Prince Edward Island.
Government of Quebec and various departments.
House of Commons, Speaker, Sergeant-at-Arms, etc.
High Commissioner for Canada, London, England.
National Tuberculosis Association.
National Council of Women.
National Committee for the Diamond Jubilee.
Parliamentary Press Gallery and correspondents.
Post Office Department.
Prime Minister's Office.
Quebec Department of Agriculture.
Railway Commission.
United States Legation, Ottawa, Canada.
World's Poultry Congress.

CO-OPERATIVE WORK WITH COMMERCIAL FILM PRODUCERS

Several years ago, a policy of co-operating with commercial film producers, especially the large producers in the United States operating in Canada, was inaugurated, the idea being to encourage the greater production of films in the Dominion, and to ensure that depictions of Canada and Canadian life should bear the stamp of authenticity.

During the past fiscal year, this policy was enlarged to include a definite co-operative scheme with the so-called "news weekly" producers and the producers of films similar to those of the bureau. The value of this development was strikingly demonstrated during the celebration of recent great events in the Dominion—the Diamond Jubilee of Confederation, the visit of H.R.H. the Prince of Wales, the tour of the British Premier, the opening of the new Peace Bridge, and the holding of the World's Poultry Congress in Ottawa—when the co-operation of the bureau with the commercial film concerns was the means of securing wide pictorial publicity for Canada throughout the world.

PRODUCTION OF TECHNICAL, INFORMATIVE AND INSTRUCTIONAL FILMS AND PHOTOGRAPHS FOR GOVERNMENTAL USE

Until a few years ago the bulk of the technical, informative and instructional films produced for use by departments other than our own were made by commercial concerns, the bureau lacking the necessary equipment and facilities for this type of work. Of recent years, however, this branch of the bureau's work has been steadily developed and during the past fiscal year additional equipment has been secured and, in co-operation with the departments concerned, practically all films of this nature required are produced.

The bureau operates a plant for the production of still photographs of all kinds, exterior or interior, enlargements, transparencies, lantern slides, photographic copying, and reproductions and other material of this type. During the past fiscal year exceptional calls were made upon it, and among the new activities has been the handling of special assignments to produce all governmental official group photos and pictorial records of national events. Other developments have been the production of special technical and scientific photographic reproductions for research and record purposes, and development of greater world publicity co-operative measures with news and other agencies.

PROSPECTS FOR DEVELOPMENT AND EXPANSION

Further expansion of the bureau's activities and an increased volume of production during the coming year seem assured. With contracts already entered into and expected developments in other fields, it is confidently expected that the revenue of the bureau will be substantially increased. The expansion of the bureau's efforts in the production and distribution of pictorial publicity of the non-revenue bearing type is only limited by the capacity of the plant and by the funds available for this work. There is much new territory, hitherto undeveloped, in which, with the co-operation of our Trade Commissioners, the bureau can secure circulation, while fields in which circulation is now being secured can be further developed. Further general circulation within the Empire is in prospect through co-operative work with the Empire Marketing Board and other organizations.

In the theatrical field, there is a growing demand for material produced by the bureau. The enactment of Film Quota Laws in Great Britain, Australia, New Zealand and other parts of the Empire should open up a greater field for this bureau's activities within the Empire; and in other countries there is plenty of scope for expected development.

In Canada, South America, and South Africa, new contracts already entered into assure further development and increased revenue and it is hoped to be able to develop the theatrical circulation of our films on a favourable and profitable basis.

BOARD OF GRAIN COMMISSIONERS FOR CANADA

MOVEMENT AND HANDLING OF 1927 WESTERN CANADIAN GRAIN CROPS

Very wet weather during the early spring of 1927 seriously delayed the seeding of the crops throughout Western Canada. The excess moisture ensured a heavy growth, but the grain was far from maturity when early frosts occurred and large areas suffered so badly that the grain was entirely ruined or not worth cutting. Then for the third year in succession heavy rains were general during the greater part of the harvest season and much grain had to remain in the fields, where cut, until the spring before it could be threshed.

The effects of the inclement weather upon the quality of the grain were most marked, with the result that European importers showed a distinct preference for the better qualities available from the United States, Argentina and Australia. The marketing of Canadian wheat proceeded much slower than would have been the case under more normal conditions.

The province of Alberta reaped the largest wheat crop in its history. A large quantity of this was harvested before the continued wet weather set in and this fact, coupled with the plenitude of ocean tonnage from Pacific Ports at more favourable rates, and the lower rail rates to Vancouver and Prince Rupert, attracted a larger proportion of the export movement via the western outlet. Shipments via Vancouver have already exceeded those of previous years and will probably exceed 80 million bushels for the season.

The steady increase in the volume of grain production in Western Canada and the large addition to the acreage which is expected to be made this spring, have rendered necessary large increases in the elevator facilities at different points, in order to handle the expected volume expeditiously. At Vancouver, Victoria and New Westminster four elevators are being erected which will add approximately four and a half million bushels to the present 8,305,000 bushels storage capacity, ready for the movement of the 1928 crops. At Montreal an addition of three million bushels storage capacity is being made to the Harbour Commissioners' elevator No. 3, which will make a total of 15,160,000 bushels. At Toronto an elevator is being erected with a capacity of two million bushels, whilst one is nearing completion of approximately 500,000 bushels capacity. At Port Arthur a new house is being erected for the Canadian Pool of six and a half million bushels capacity, and an addition of two and a half million bushels capacity is to be made to the Reliance elevator. At Fort William a new elevator is being erected for the Searle Grain Company of three million bushels capacity. Only last year new buildings and additions to existing elevators increased the storage capacity at Fort William-Port Arthur by ten and a half million bushels, and the completion of the work now in progress will make a total capacity of eighty-four and a half million bushels at this port.

The large additions made to the drying capacity of elevators at terminal points during the past two seasons effectually prevented the accumulation of cars of grain out of condition. The following tables show the number of cars of grain graded "No Grade" and "Sprouted," as compared with the total inspected; also the total amounts dried at the public terminal elevators, as compared with the total quantity inspected, during the first eight months of the crop year.

AUGUST 1 TO MARCH 31

—	Crop Year, 1927-28			Crop Year 1926-27		
	Total Inspected	Graded No Grade	Graded Sprouted	Total Inspected	Graded No Grade	Graded Sprouted
	cars	cars	cars	cars	cars	cars
Wheat	244,445	114,915	70	216,033	111,401	8,923
Oats	11,732	6,444	.....	11,165	8,672	.....
Barley	15,770	11,148	.....	23,918	20,040	.....
Flaxseed	2,417	638	.....	2,943	2,032	.....
Rye	7,189	3,428	.....	5,157	3,386	.....

AUGUST 1, 1927, TO MARCH 31, 1928

—	Total Graded No Grade	Total dried at Public Elevators	
		No Grade Tough	No Grade Damp
	bushels	bushels	bushels
Wheat	151,687,800	4,255,437	2,201,404
Oats	12,533,600	31,505	62,547
Barley	16,331,800	116,057	474,154
Flaxseed	772,000	367,745	42,775
Rye	4,782,000	63,808	115,540
Mixed grain	.....	10,211	12,759

The grain crops of 1927 in Europe were neither as large as those of 1926, nor of as good quality. A good deal of inclement weather was experienced over large areas at harvest time and much grain was seriously affected thereby, as in Canada. On the other hand, large crops were harvested in North America and Argentina and ocean tonnage was plentiful at low rates. Consequently, importers have not made heavy commitments ahead but have purchased according to requirements. The poor quality of domestic supplies and the heavy moisture content created a distinct preference for dry wheat of high gluten content, so that the United States and Argentine supplies were in greater demand in some markets than Canadian.

Total receipts at terminal points in the Western Grain Inspection Division for the first eight months of the crop year follow:—

AUGUST 1, 1927 TO MARCH 31, 1928

—	Wheat	Other Grains	Total
	bush.	bush.	bush.
Fort William-Port Arthur	208,277,108	38,766,557	247,043,665
Vancouver	60,974,923	752,038	61,699,961
Prince Rupert	6,952,094	10,314	6,962,408
Canadian Govt. Interior Terminal Elevators—			
Calgary	4,401,189	525,992	4,927,181
Edmonton	3,886,219	226,877	4,113,096
Moose Jaw	2,297,620	311,659	2,609,279
Saskatoon	1,611,653	783,410	2,395,063

Weights and Measures Inspection Service

The Director of the Weights and Measures Inspection Service reports that, notwithstanding the general salary increase of $120 given to the Civil Service during the past fiscal year, adding some $12,540 to expenditure on account of salaries, the service succeeded in maintaining its favourable balance of revenue over expenditure, and even added to it, as compared with 1926-27. The surplus amounted to $44,578.26, showing an increase of $12,724.26.

Total collections on account of revenue amounted to $362,242.81, as against $333,291.72 for 1926-27, showing an increase of $28,951.09.

Total expenditure, including general salary increase charge, amounted to $317,664.55, as against $301,437.72 for 1926-27, an increase of $16,226.83.

The mileage travelled—an important factor on the expense side—totalled 297,442 miles as against 288,885 in 1926-27—an increase of 8,557 miles—these figures not including the mileage covered in city inspection work, which alone runs into thousands of miles every year.

The surplus of revenue over expenditure amounts to $44,578.26, as against a surplus of $31,854 for 1926-27—showing an increase of $12,724.26. There was a further slight reduction in the operating cost of the Service, the ratio being 88 cents on the dollar as against 90 cents for 1926-27 and 93 cents for 1925-26.

Of the $16,226.83 increase in expenditure, $12,540 is represented by the flat salary increase, leaving $3,686.83 normal increase in expenses as against $28,951.09 increase in revenue collected.

Of the surplus of revenue over expenditure, it might be remarked—lest it should be considered too large for a protective and a non-revenue service—that against it can fairly be charged the salaries of the staff in the director's office in the department, amounting to approximately $20,000, and the rental of all the district and sub-offices throughout the Dominion, which is paid by the Department of Public Works, thus leaving the service little more than just self-supporting, which is the guiding principle in the adjustment of the statutory inspection fees.

In statistical form the record of the service since 1920 is as follows:—

	Inspectors	Expenses	Revenue	Deficit	Surplus
		$ cts.	$ cts.	$ cts.	$ cts.
1920-21	124	307,076 08	267,105 62	39,970 46	.....
1921-22	120	313,982 04	272,137 02	41,845 02	.....
1922-23	119	302,141 58	278,259 04	23,882 54	.....
1923-24	116	312,744 34	290,450 18	22,294 16	.....
1924-25	111	293,030 75	294,106 64	.....	1,075 89
1925-26	111	293,193 65	315,841 41	.....	22,647 76
1926-27	109	301,437 32	333,291 72	.....	31,854 00
1927-28	108	317,664 55	362,242 81	.....	44,578 26

The reduction in the staff by one inspector is explained by the death of one officer in Hamilton and the retirement of another in Winnipeg, where it was felt unnecessary to make replacements, as against the addition of one officer to the London District.

Responsive as weights and measures inspection must be to commercial and industrial expansion, an increase in staff here and there is unavoidable. Inspection work continually increases, although not uniformly throughout the Dominion. The modern extension of the motor car, for instance, has superimposed a whole new field of weights and measures activity in the distribution and sale of gasolene through the intermediacy of the tank car, compartment tank wagon, filling station pumps and meters, and the oil bottle. Hence the additional help in London, whilst conditions in Toronto and Montreal also call for more assistance, if field and city inspection in these districts is to be covered and the increasing demands of factory and importation inspections are to be met without delays.

INSPECTION DATA

Following is a statistical statement of the various appliances and articles inspected during the year:—

Articles	Submitted	Verified	Rejected	Per cent of Rejection
Weights.....(Dom.)	84,474	82,908	1,566	1·85
Weights.....(Metric)	641	630	11	1·7
Measures of Capacity.....(Dom.)	94,465	94,286	179	0·18
Measures of Length.....(Dom.)	7,954	7,915	39	0·49
Milk Cans.....	86,767	86,701	66	0·07
Ice Cream Containers.....	40,263	40,263	.....	.....
Measuring Devices.....	34,776	31,926	2,850	8·19
Weighing Machines.....	182,310	163,926	18,384	10·08
Weighing Machines.....(Metric)	519	495	24	4·6
Babcock Glassware.....	49,235	48,447	788	1·6
Tank Wagons.....	184	184	.....	.....
	581,588	557,681	23,907	.....

The above statistics show but a relatively small increase year by year, 581,588 for 1927-28, as against 573,221 for 1926-27. The reason is that Weights and Measures appliances, like all other industrial facilities, are becoming automatic or semi-automatic and power-driven, so that one modern machine displaces two, three or half a dozen of the old type.

Another important factor is the enormous increase in package goods and in the development of chain stores. Automatic machines put up package goods in hundreds per hour, whilst one scale will now do duty in most stores for the few sales made up from bulk. Fortunately new industries spring up, like the gasolene trade, with a new range of inspectable appliances, to compensate for the decline in other fields, and actually increase the work to be done.

SEIZURES AND PROSECUTIONS

During the year returns for some 126 seizures of defective and unjust machines and devices were made, and numbers of foreign importations were refused entry into the country at the Customs as being unapproved for use in Canada. It is certain that the actual eliminations were much larger than the figures indicate, as the officers frequently destroy such things as cheap and faulty measures, forgetting to make a return in the rush and preoccupation of their work and incessant travelling.

There were only nine prosecutions, resulting in nine convictions and the collections of $170 in fines. Again the figures are small, almost to the point of criticism, but it has not yet become the policy of the department to prosecute each and every offence. Legally, an incorrect weight or measure is "false and unjust" and its use subject to prosecution, and in this connection some 18,384 gasolene machines were rejected and some 23,665 weights adjusted—but the prosecution of all such cases would be far too harsh a practice.

THE METRIC SYSTEM

During the fall of 1927 the International Bureau of Weights and Measures at Sèvres, France, held its seventh sexennial conference. The bureau is maintained jointly by some thirty-one countries in the interest of the advancement of metrological science, the establishment of international scientific and technological standards, and as the repository of the International Standards of the Metric System.

As a contributing state, Canada was represented by the Deputy Warden of the Standards, London, England, as Canada's interest in the metric system is largely identifiable with that of Great Britain and the rest of the Empire. The scientific work discussed at the Conference is a matter for specialists, but one essentially commercial proposal was advanced by the representatives of the Argentine and Mexico, and this was that the United States and Great Britain should adopt the metric system "particularly in connection with agricultural machinery, grain handling plant and the like". The inference to be drawn is that the machinery in question supplied to the Argentine and Mexican markets is made to English measurements and is therefore not as suitable or acceptable as it should be for these metric countries. There is a lesson here for the Canadian manufacturer that he would do well to study and turn to profit by making and quoting all manufactured products for metric markets in the metric system. This does not necessarily mean the redesigning or the duplication of any dies, jigs or plant machinery, but merely the conversion of dimensions into metric equivalents to the nearest millimetre, and the conversion of pounds weight into kilograms. A simple but very consequential detail in developing foreign markets.

Electricity and Gas Inspection Branch

The Director of the Electricity and Gas Inspection Branch reports that the work of the branch continues to increase as shown by the following comparative statement for the past two years:—

	1926–27	1927–28
Electricity and Gas Inspection Acts—		
Electricity meters tested	283,297	293,325
Gas meters tested	109,196	122,684
Total meters tested	392,493	416,009
Revenue—		
Electricity Inspection	$ 180,865 95	$189,581 45
Gas inspection	76,890 20	85,715 60
Total revenue	$ 257,756 15	$ 275,297 05
Expenditure—		
Electricity inspection	$ 121,585 92	$ 146,189 40
Gas inspection	52,875 53	52,839 44
Total expenditure	$ 174,461 45	$ 199,028 84
Electricity and Fluid Exportation Act		
Revenue—		
Export tax	$ 357,421 89	$ 373,676 21
License fees	650 50	675 00
Total revenue	$ 358,082 39	$ 374,351 21
Expenditure—		
Travelling expenses	$ 258 46	$ 440,59
Total revenue for branch	$ 615,828 54	$ 649,648 26
Total expenditure for branch	175,833 18	199,469 43
Surplus	$ 439,995 36	$ 450,188 83

The total number of meters tested under the authority of the Electricity Inspection Act and the Gas Inspection Act was 416,009, an increase of 23,516 over the previous year and the increase in revenue amounted to $17,540.90. There was a considerable increase in expenditure due to the purchase of several instruments to replace old ones and a general increase in the salaries of the

entire staff, and as a consequence there is a decrease in the surplus of $6,026.49 as compared with the previous year. The surplus for this year—which does not take into account rent, fuel, furniture and the salaries of the officers in the Ottawa laboratory—was $76,268.21.

GAS INSPECTION SERVICE

The falling off in the Gas Inspection work during 1926-27 was more than balanced this year, the increase in the number of meters tested being 13,488. This increase is due to the increase in the number of new meters that were tested: 41,628 this year as compared with 27,305 last year.

The number of gas meters in use on March 31, 1928, on manufactured gas was 482,433, an increase of 19,937 over the previous year.

Manufactured gas continues to be used in increasing quantities. During the fiscal year just closed 16,052,836,000 cubic feet of gas were sold as compared with 15,227,161,097 the previous year, an increase of 825,675,000 cubic feet.

The total production of natural gas has increased very rapidly during the past two years, 20,350,000,000 cubic feet having been sold in 1927-28 as compared with 17,863,000,000 cubic feet during 1926-27 and 13,000,000,000 during 1925-26.

The total number of meters measuring natural gas on March 31, 1928, was 98,915.

ELECTRICITY INSPECTION SERVICE

The work connected with the Electricity Inspection service continues to grow. There were 293,325 meters tested during the year, an increase of 10,028 over the previous year. The number of new meters tested increased from 85,946 to 95,496 and the total number of meters in service on March 31, 1928, was 1,422,566.

ELECTRICAL STANDARDS LABORATORY

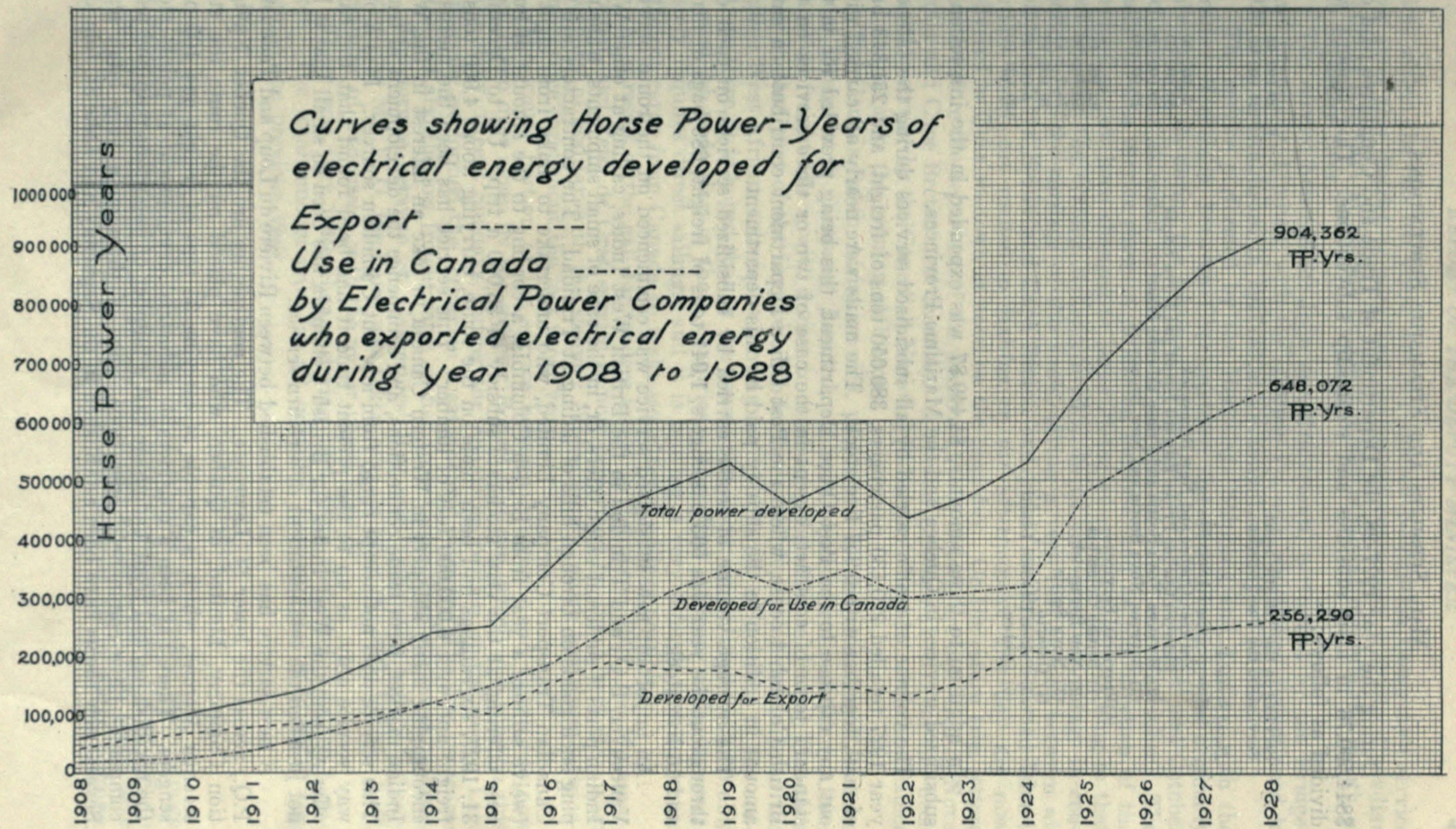
The work performed in the laboratories at Ottawa, Winnipeg and Vancouver is most important. In order to carry on the inspection work in a satisfactory manner, it is essential that the inspection standards be compared frequently with the standard apparatus maintained in the laboratories. The main reference laboratory is at Ottawa and a check kept on the apparatus in the others.

During the past year the following instruments were checked: For our own inspection service, 125 rotating standards, 54 wattmeters, 29 voltmeters, and 28 ammeters. For outside companies, 27 rotating standards, 7 wattmeters, 9 voltmeters, and 7 ammeters. In addition to these, 20 electric meters and 6 gas meters were tested for approval for use in Canada. All approval tests on meters are made in the Ottawa laboratory.

EXPORTATION OF ELECTRICAL ENERGY

The number of kilowatt hours produced for export was 1,674,856,007, an increase of 66,198,833 kilowatt hours. The attached chart giving the particulars of electrical energy produced for export and produced for use in Canada by the exporting companies since the Electricity and Fluid Exportation Act was passed in 1907 may be of interest.

As shown in the preceding statement, the revenue received on account of the export duty amounted to $373,676.21, an increase of $16,254.32, and the expenditure was $440.59, an increase of $182.13. This increase in expenditure may be accounted for by the fact that a closer check was kept on the export meters.


Curves showing Horse Power-Years of electrical energy developed for
Export
Use in Canada
by Electrical Power Companies who exported electrical energy during year 1908 to 1928
Horse Power Years
1000000
900000
800000
700000
600000
500000
400000
300,000
200,000
100,000
0
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
Total power developed
Developed for Use in Canada
Developed for Export
904,362 HP-Yrs.
648,072 HP-Yrs.
256,290 HP-Yrs.

Mail Subsidies and Steamship Subventions

During the year 1927-28, the Department of Trade and Commerce paid out $844,590.76 in mail subsidies and steamship subventions. This amount was divided as follows:—

Services on the Atlantic ocean	$ 99,999 96
Services on the Pacific ocean	124,000 00
Local Services—	
(*a*) Interprovincial Services—	
(1) Between Quebec and New Brunswick	3,000 00
Between Quebec Prince Edward Island and Nova Scotia	50,000 00
(2) Between Nova Scotia and Prince Edward Island	35,000 00
(3) Between Nova Scotia and New Brunswick	45,000 00
(*b*) Provincial Services—	
(1) British Columbia	92,907 14
(2) New Brunswick	30,500 00
(3) Nova Scotia	174,712 81
(4) Ontario	10,999 98
(5) Prince Edward Island	5,000 00
(6) Quebec	169,021 00

In addition to these amounts, $4,449.87 was expended in the inspection of subsidized services in Quebec and the Maritime Provinces.

The volume of traffic carried by all subsidized services during the calendar year 1927 totalled 220,130 passengers, 380,050 tons of freight, and 251,343 bags of mail, together with 5,957 live stock. The mails were nearly all carried without any expense to the Post Office Department, this being provided for in the standard form of contract, except in the case of two or three services on the British Columbia coast, where the Post Office Department contributes a small amount in addition to the subsidy paid by this department.

The average volume of traffic carried by subsidized services on each day throughout the year was 603 passengers, 1,041 tons of freight, 689 bags of mails, and 16 live stock.

An important new subsidized service was commenced on the route between Vancouver, B.C., and Trinidad in the British West Indies, calling at other West Indian ports if sufficient cargo offers, or, in the case of small shipments, transhipping such goods on through bills of lading at Trinidad. The contractors are the Canadian Transport Company Limited, who undertake to make from eight to twelve sailings a year from British Columbia, according to the amount of business offering, at the very moderate subsidy of $3,000 a trip. Up to December 31, 1927, six sailings had been made on the route, carrying about 4,000 tons of freight and over 6,000,000 feet of lumber. This service has been the means of encouraging many shippers in Western Canada to take an interest in the West Indian market, form trade connections, and commence the development of trade. This service does not accept cargo from any but Canadian sources. It is a one-way service only, as up to the present time it has been found that the cargo offering from the West Indies for British Columbia has been so small that it has not justified the establishment of a return service.

A new service has been established between Rivière du Loup and Tadoussac, P.Q., across the lower St. Lawrence. The contractors are the Quebec Navigation Company, Limited, of Quebec, who have placed on the route the steel steamer *Mercier*, which is capable of carrying 35 tons of freight and 100 passengers. There has been a considerable industrial development at points along the north shore, and from Tadoussac east a number of important pulp and paper companies have commenced operations, some of them on a very large scale. Several new towns have been established in the Saguenay and Lake St. John dis-

tricts within the last ten years, and the Quebec Navigation Company's service now gives this district a quick and convenient connection with the Canadian National Railways at Rivière du Loup, which is almost opposite the mouth of the Saguenay river.

The service between St. John and Bridgetown, performed by the Bridgetown Company, Limited, with the steamer *Valinda,* which was discontinued in 1926, was re-established in 1927-28 at an annual subsidy of $1,000.

The service performed by the Hochelaga Shipping and Towing, with the steamer *Hochelaga,* between Charlottetown and Pictou, which was originally only carried on during the five months of the year between June and October inclusive, was extended to include the months of May and November. The traffic on this service shows a promising increase, and as the direction of the service has now been changed to leave Pictou every morning, returning to that port again in the evening, it has proved to be of very great advantage in connection with the carriage of the mails, giving a very fast service between all points of Nova Scotia and Cape Breton and points on Prince Edward Island. Letters which are mailed in Halifax on the afternoon of any day are now delivered in Charlottetown at noon on the next day. On the return trip, letters mailed before the departure of the steamer at four o'clock are delivered in Nova Scotia and Cape Breton next morning. A special gasolene electric car has been placed in service by the Canadian National Railways to connect with the steamer on her arrival in the evening at Pictou.

The Canada-South Africa service, performed by the steamers of Messrs. Elder Dempster & Company, Limited, continue to make calls at West Africa whenever freight offers, with a view to continuing the effort to develop Canada's trade in that part of the Empire. While the establishment of our trade in the British West African colonies is proving a very difficult task, owing to the conditions there, it is hoped that in the course of a short time Canada will be able to establish a footing in those countries. The West African trade, however, merely requires direct sailings, and it is proving a very difficult task to secure sufficient cargo from Canada to make such direct sailings possible.

As a result of the call for tenders issued in February, 1927, the Mulgrave, Arichat, and Petit de Grat service is now performed by the Albert Steamship Company of Halifax with the steamer *Prince Albert,* which has given satisfactory service throughout the last fiscal year.

The winter portion of the service between Mulgrave and Canso has now been taken over again by the steamer *Robert G. Cann,* which also runs on this route daily, except Sundays, during the remaining portion of the year. Last winter she performed the service in a satisfactory manner. The low passenger rates and also the low freight rates on fish from Canso were continued in effect.

The service between St. Catherines' Bay and Tadoussac, previously performed by Mr. E. O. Bouliane, was taken over on May 16, 1927, by Mr. J. C. Tremblay of Tadoussac, with the motor vessel *Pixie B.*

There was very little change during 1927-28 in the other subsidized services. The total amount paid for all subsidies, however, was $164,408.16 less than in the previous year.

Gold and Silver Marking Act

The Inspector under the Gold and Silver Marking Act reports that, through the medium of the trade journals and the jewelers' associations, the provisions of this act have been so instilled into the minds of the trade that there have been very few complaints of its violation, and none at all to warrant prosecution.

This, however, does not mean that the jewelers, silversmiths and kindred trades are satisfied with present conditions; on the contrary—they claim that, while the Gold and Silver Marking Act is a great protection to the buying public of Canada, they find it very difficult to compete with goods brought into Canada in parts and assembled here and the Canadian manufacturer's trade mark applied to them; thereby complying with the Gold and Silver Marking Act, but evading the proper valuation of such goods coming into the country.

The number of hands employed in Canada in the manufacturing of jewellery has fallen off 50 per cent in the last ten years, owing chiefly to the mass production of tool-made goods in other countries, and their importation in parts to be assembled and finished in this country.

The adoption of a national trade mark to be applied only to goods made in Canada might remedy conditions. This has been recommended in previous reports and designs for such marks have even been submitted, after the same had been submitted to the Hall Mark authorities of Great Britain, who offered no objection. The application of such a mark would enhance the reputation of goods made in Canada.

Bounties

Bounty on Copper Bars 1927-28

6,923,478 lbs. at ¾ cents per pound	$ 51,925 69
5,578,693 lbs. at ½ cent per pound	27,893 47
Total	$ 79,819 16

Bounty on Hemp 1927-28

19,048 lbs. at 1½ cents	$ 285 72
196,508 lbs. at 1⅜ cents	2,701 98
Total	$ 2,987 70

Revenue and Expenditure

Appended will be found the usual statements of revenue and expenditure of the department for the last fiscal year.

All of which is respectfully submitted.

F. C. T. O'HARA,

Deputy Minister.

REVENUE—DEPARTMENT OF TRADE AND COMMERCE

SUMMARY of the Revenue of the Department for the Services indicated during a period of fifteen years, i.e., April 1, 1913, to March 31, 1928.

Fiscal Year	Canada Grain Act	Canadian Government Elevators	Weights and Measures *(a)*	Gas and Electricity	Electricity Exportation Act *(b)*	Culler's Fees %	Board of Grain Supervisors	War Trade Board	Canadian Government Motion Picture Bureau	Patent Fees *(d)*	Miscellaneous Revenue	Totals
	$	$	$	$	$	$	$	$	$	$	$	$
1913–14	402,689 87	107,494 14	.....	.....	.....	1,799 40	.....	.....	.....	.....	14 78	511,998 19
1914–15	276,711 45	240,323 18	.....	.....	.....	3,114 54	.....	.....	.....	.....	896 76	521,045 93
1915–16	469,049 69	444,566 77	.....	.....	.....	1,737 07	.....	.....	.....	.....	22,225 09	937,578 62
1916–17	569,772 65	890,038 75	.....	.....	.....	1,554 78	.....	.....	.....	.....	2,033 15	1,463,399 33
1917–18	563,266 92	936,608 96	.....	.....	.....	1,342 18	.....	.....	.....	.....	26,608 51	1,527,826 57
1918–19	340,545 75	741,523 88	.....	.....	.....	1,229 49	.....	.....	.....	275,708 85	64,458 40	1,423,466 37
1919–20	394,309 77	698,295 82	149,473 43	175,125 27	.....	1,272 82	350,000 00	262,469 34	.....	354,496 97	152,556 17	2,537,999 59
1920–21	810,952 57	672,325 00	264,218 95	211,828 60	.....	2,070 15	.....	.....	11,917 06	.....	93,413 17	2,066,725 50
1921–22	1,133,121 87	804,201 16	269,805 65	221,550 80	.....	.....	.....	.....	2,805 27	.....	12,690 95	2,444,175 70
1922–23	1,503,616 09	860,421 39	278,259 04	204,420 31	.....	.....	.....	.....	16,141 10	.....	1,497 67	2,864,355 60
1923–24	1,661,223 84	658,747 21	290,175 30	220,227 05	.....	.....	.....	.....	17,090 98	.....	3,062 90	2,850,527 28
1924–25	1,446,199 79	876,566 00	293,764 87	216,413 90	.....	.....	.....	.....	27,876 79	.....	17,288 33	2,878,109 68
1925–26	1,642,054 30	1,043,481 89	315,703 65	247,221 40	288,992 41	.....	.....	.....	22,163 50	.....	2,613 96	3,562,231 11
1926–27	1,582,807 21	1,000,176 94	333,034 24	257,724 35	358,072 39	.....	.....	.....	15,129 08	.....	16,885 85	3,563,830 06
1927–28	1,718,803 04	959,074 48	361,690 13	275,277 05	374,351 21	.....	.....	.....	17,912 26	327,231 44	5,621 92	4,039,961 53
	14,515,124 81	10,933,845 57	2,556,125 26	2,029,788 73	1,021,416 01	14,120 43	350,000 00	262,469 34	131,036 04	957,437 26	421,867 61	33,193,231 06

(a) Prior to September, 1918, the Weights and Measures, and Gas and Electricity Services were under the Department of Inland Revenue.
(b) The Electricity and Exportation Act was passed on April 27, 1907, but no export duty was imposed until April 1, 1925.
(c) Cullers Act abolished in 1921.
(d) Patent Office under Trade and Commerce during 1918–19—1919–20; and eight months during 1927–28.

STATEMENT OF EXPENDITURE, DEPARTMENT OF TRADE AND COMMERCE, FOR THE FISCAL YEARS ENDED MARCH 31, 1918 TO MARCH 31, 1928

—	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28
	$	$	$	$	$	$	$	$	$	$	$
Civil Government	137,195 66	150,204 05	406,563 34	289,466 27	387,354 97	412,783 00	465,460 86	444,766 24	465,464 14	481,831 75	(g) 633,965 65
Canada Grain Act	634,422 50	598,369 21	617,781 33	654,615 58	868,970 07	953,342 39	1,132,664 10	1,098,288 66	1,149,118 54	1,580,258 40	1,648,562 37
Commercial Intelligence	140,912 50	148,574 14	191,896 14	237,688 67	229,246 87	304,859 41	315,686 95	315,032 45	320,837 34	357,415 25	413,294 31
Elevators, Operation and Management	373,566 54	339,152 12	307,815 95	404,949 77	366,029 93	432,812 35	417,016 96	333,501 17	409,029 65	470,271 00	443,046 92
Elevators, Construction and Maintenance	29,671 59	11,562 71	895 00	9,749 51	2,531 18	74,356 95	110,744 96	1,538,052 82	1,775,144 02	379,435 46	370,860 73
Bureau of Statistics	52,167 82	74,754 91	82,517 55	237,483 89	134,697 24	103,857 87	99,081 04	76,150 35	82,413 26	105,293 82	101,892 16
Census	.....	.....	.....	.....	1,664,088 04	259,148 28	158,015 70	40,800 09	.....	455,559 24	61,764 34
Research Council (a)	54,938 02	61,130 00	94,507 23	109,577 48	119,563 37	105,210 96	119,810 90	116,213 66	134,996 60	150,000 00	169,998 41
Mail Subsidies and Steamship Subventions	1,853,319 55	1,391,849 97	1,632,905 80	1,094,508 89	1,105,895 91	1,070,684 08	1,105,086 76	1,055,643 23	1,078,038 10	1,008,998 92	844,590 76
West India Cable	38,933 32	38,933 33	33,723 91	34,066 07	38,917 79	38,933 32	38,933 32	19,466 66	.....	.....	.....
Weights and Measures Inspection (b)	.....	.....	226,851 82	267,909 35	286,165 55	279,855 25	293,715 94	285,041 46	293,193 65	301,437 72	306,194 55
Electricity and Gas Inspection (b)	.....	.....	119,474 93	138,000 00	145,145 88	156,702 26	169,672 31	163,072 79	167,028 24	174,461 45	192,298 84
War Appropriation	117,201 22	836,607 23	.....	.....	.....	.....	.....	.....	.....	.....	.....
Demobilization (c)	.....	.....	1,057,859 25	71,959 63	1,710 46	.....	.....	.....	.....	.....	.....
Bounties	113,496 85	270,802 48	352,558 52	149,202 35	100,140 14	95,749 93	79,809 51	72,043 73	31,783 82	164,791 01	82,806 86
British and Foreign News Service	.....	.....	.....	.....	.....	.....	21,333 34	32,000 00	32,000 00	32,000 00	32,000 00
Exhibitions (d)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38,012 41
Amount required to supplement the British Government Scheme for the Marketing of Empire Produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30,952 26
Publicity and Advertising	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49,989 60
Miscellaneous	65,295 86	69,298 94	632,643 82	(e) 55,316 41	559,894 12	354,805 78	730,359 18	283,016 00	191,975 35	165,637 71	286,760 96
	3,611,121 33	3,991,239 09	(f)5,757,994 59	3,754,493 87	6,010,351 62	4,643,101 83	5,257,391 86	5,873,089 31	6,131,022 71	5,827,391 73	5,706,991 13

NOTES—

(a) Established in 1918.
(b) Attached to Inland Revenue Department prior to 1919.
(c) No expenditure prior to date indicated.
(d) This amount covers the expenditures from December 1, 1927 to March 31, 1928.
(e) This item was reduced by refunds from the sale of pig iron, amounting to $801,793.91.
(f) The difference between this figure and that shown by the Auditor General's Report is $4,805.39—"Civil Government Salaries," detailed under Health Department.
(g) This amount includes salaries and contingencies of the Patents, Copyrights and Trade Marks Branch, for eight months, April 1–Nov. 30, 1927, totalling $119,626.74.

MISCELLANEOUS for 1923-24 included the following:

Provisional Bonus Allowance	$ 139,521 81
Printing Parliamentary and Departmental Publications	114,606 39
Royal Commission to inquire into Grain Trade	120,212 01
Canadian Exhibition Train	106,062 74
Japanese Relief	182,369 65
Other Miscellaneous	67,586 58
	$ 730,359 18

INDEX

PAGE

Bounties 44
British Merchandise Marks Act..... 25
Commercial Intelligence Service..... 18
  Advertising Canada on steamships.... 21
  Appointment of Director..... 19
  Assignment of territory..... 20
  Changes affecting personnel.....18, 19
  Inspection of offices..... 21
  New offices 20
  Official visits of Trade Commissioners..19, 20
  Special duties 20
  Tariff changes in various countries.... 22
  Trade index 21
  Visits of trade officials to Canada.....21, 22

Customs Tariffs
  Changes in various countries..22, 23, 24, 25

Dominion Bureau of Statistics.....26, 27
Electricity and Gas Inspection Branch..39, 40
  Exportation of electrical energy..... 40
  Electrical standards laboratory..... 40
  Electricity inspection service..... 40
  Horse power-years developed (graph). 41
  Gas inspection service..... 40
Exhibition Commission 28, 29

Expenditure, summary of Department's, fiscal years 1918 to 1928 inclusive... 46
Exports 10, 11
  Domestic exports, by main groups..... 12
  Seventy leading commodities, 1927-28.12, 13
  Via the United States..... 14
Grain Commissioners, Board of
  Movement and handling of grain crops, 1927 .....34, 35, 36
Gold and Silver Marking Act.....43, 44
Import Trade 9, 10
Imports
  Via the United States..... 1

Index
  Canadian trade 21
International Trade
  Aggregate trade of ten leading countries 15
  Balance of ten leading countries..... 16
  Canada's position in..... 14
  Domestic exports from ten leading countries 15

PAGE

  Net imports into ten leading countries.14, 15
  Per capita trade of ten leading countries 16
Mail Subsidies and Steamship Subventions 42, 43
Metric System.....38, 39
Motion Picture Bureau..... 29
  Co-operative work.....32, 33
  Distribution.....30-32
  Production.....30, 34
Revenue, summary of Department's, April 1, 1913 to March 31, 1928..... 45
Steamship subventions.....42, 43
Subsidies, Mail.....42, 43

Tariffs, *see* Customs Tariffs.
Tour of Latin America.....16, 17
  Results of.....17, 18
Trade, Canada's position in international 14
  1927-1928, analysis of trade..... 5
  by countries..... 7
  domestic exports by main groups... 12
  export trade.....10, 11
  foreign trade..... 5
  import trade..... 8
  one hundred commodities imported.. 9, 10
  seventy commodities exported.....12, 13
  quantity and price changes..... 5
  summary..... 6
  via the United States.....13, 14
  with the United States..... 6
  with the United Kingdom..... 6
  with principal countries..... 7, 8
  with all countries..... 6

Trade Commissioners:
  Changes.....18, 19
  Inspection of offices..... 21
  New offices..... 20
  Official visits to Canada.....19, 20
  Special duties..... 20
  Visits of trade officials to Canada....21, 22
Weights and Measures Inspection Service.....36, 37
  Inspection data..... 38
  Metric system.....38, 39
  Seizures and prosecutions..... 38

DEPARTMENT OF TRADE AND COMMERCE

OTTAWA, CANADA

HON. JAMES MALCOLM, Minister F. C. T. O'HARA, Deputy Minister

ANNUAL REPORT

OF THE

WEIGHTS AND MEASURES INSPECTION SERVICE

FOR THE FISCAL YEAR ENDING MARCH 31

1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

REPORT

OF THE

INSPECTION OF WEIGHTS AND MEASURES

OTTAWA, July 6, 1928.

To the Honourable
The Minister of Trade and Commerce.

SIR,—I have the honour to submit the annual report on the Weights and Measures Inspection Service, together with statistical statements, for the fiscal year ended March 31, 1928.

F. C. T. O'HARA,
Deputy Minister.

Mr. E. O. Way, Director of Weights and Measures, reports as follows:—

In keeping with the expanding industry of the country, the Weights and Measures Service again shows a sympathetic increase both in the amount of inspection work done and revenue collected. Development is chiefly noticeable in the remarkable expansion of the gasolene and fuel oil industry, which for Weights and Measures is assuming an importance second only to the Grain Trade.

Incidentally, the Service found itself confronted with an increased salary charge of some $12,540, arising out of the $120 flat rate increase granted to the Civil Service at large in the 1926–27 Session, but it is gratifying to note that this has not only been offset by increased collections, but that the surplus of last year has been maintained and even increased by $12,723.86.

In summary form, the financial status of the Service is as follows, details by Districts being more fully given in Appendix A.

For 1927-28 total collections on account of revenue amounted to $362,242.81, as against $333,291.72 for 1926-27, showing an increase of $28,951.09.

Total expenditure, including general salary increase charge, amounted to $317,664.55, as against $301,437.72 for 1926-27, showing an increase of $16,226.83.

The surplus of revenue over expenditure amounts to $44,578.26, as against a surplus of $31,854.00 for 1926-27, showing an increase or improvement of $12,724.26.

The mileage travelled, an important factor on the expense side, totalled 297,442 miles, as against 288,885 in 1926-27, an increase of 8,557 miles, these figures not including the mileage covered in city inspection work, which alone runs into thousands of miles every year.

Regard for efficiency is shown in a further slight reduction in the operating cost of the service, the ratio being 88 cents on the dollar as against 90 cents for 1926-27 and 93 cents for 1925-26, a showing which implies commendable industry and studied care on the part of the whole personnel.

Of the $16,226.83 increase in expenditure, $12,540 is represented by the flat salary increase, leaving but $3,686.83 normal increase in expenses as against $28,951.09 increase in revenue collected.

Of the surplus of revenue over expenditure, it might be remarked, lest it should be considered too large for a protective and a non-revenue service, that against it can fairly be charged the salaries of the staff in the director's office in the department, amounting to approximately $20,000, and the rental of all the district and sub-offices throughout the Dominion, which is paid by the

Department of Public Works, thus leaving the service little more than just self-supporting, which is the guiding principle in the adjustment of the statutory inspection fees.

In statistical form the record of the service since 1920 is as follows:—

—	Inspectors	Expenses	Revenue	Deficit	Surplus
		$ cts.	$ cts.	$ cts.	$ cts.
1920–21	124	307,076 08	267,105 62	39,970 46	.....
1921–22	120	313,982 04	272,137 02	41,845 02	.....
1922–23	119	302,141 58	278,259 04	23,882 54	.....
1923–24	116	312,744 34	290,450 18	22,294 16	.....
1924–25	111	293,030 75	294,106 64	.....	1,075 89
1925–26	111	293,193 65	315,841 14	.....	22,647 49
1926–27	109	301,437 72	333,291 72	.....	31,854 00
1927–28	108	317,664 55	362,242 81	.....	44,578 26

The above figures have been plotted in graphical form (page 15) and show at a glance the interrelation between revenue, expenses and personnel for each year, the notable feature being the steady reduction in staff parallel with the steady increase in revenue.

The reduction in the staff by one inspector for last year is explained by the death of one officer in Hamilton and the retirement of another in Winnipeg, where it was felt unnecessary to make replacements, as against the addition of one officer to the London District.

The staff, however, is now right down to rock bottom throughout the Dominion and from now on additional appointments, here and there, to meet the ever expanding trade and development of the country, will be an inevitable contingency. Inspection work continually increases, although not uniformly throughout the Dominion. The modern extension of the motor car and fuel oil industry, for instance, has superimposed a whole new field of Weights and Measures activity in the distribution and sale of gasolene and oil through the intermediacy of the tank car, compartment tank wagon, filling station pumps and meters and the oil bottle. Hence the additional help in London, whilst conditions in Toronto and Montreal also call for more assistance, if field and city inspection in these districts is to be covered and the increasing demands of factory and importation inspections are to be met without delays, against which those interested are understandably resentful.

Inspection Data

Following is a statistical statement of the various appliances and articles inspected during the year, of which a detailed analysis will be found in appendices B and C.

Articles	Submitted	Verified	Rejected	Percent. of Rejection
Weights (Dominion)	84,474	82,908	1,566	1·85
Weights (Metric)	641	630	11	1·7
Measures of Capacity (Dominion)	94,465	94,286	179	0·18
Measures of Length (Dominion)	7,954	7,915	39	0·49
Milk Cans	86,767	86,701	66	0·07
Ice Cream Containers	40,263	40,263	.....	.....
Measuring Devices	34,776	31,926	2,850	8·19
Weighing Machines	182,310	163,926	18,384	10·08
Weighing Machines (Metric)	519	495	24	4·6
Babcock Glassware	49,235	48,447	788	1·6
Tank Wagons	184	184	.....	.....
	581,588	557,681	23,907	.....

The above statistics show but a relatively small increase year by year, 581,-588 for 1927-28 as against 573,221 for 1926-27. The reason is that Weights and Measures appliances, like all other industrial facilities, are becoming automatic or semi-automatic and power driven, so that one modern machine displaces two, three or half a dozen of the old type simple devices.

Another important factor is the enormous increase in package goods and the chain stores. Automatic machines put up package goods in hundreds per hour, whilst one scale will now do duty in most stores for the few sales made up from bulk. Fortunately, new industries spring up, like the gasolene trade, with a new range of inspectable appliances to compensate, and actually increase the work to be done.

Seizures and Prosecutions

During the year, returns for some 126 seizures of defective and unjust machines and devices were made, and numbers of foreign importations were refused entry into the country at the custons as being unapproved for use in Canada. It is certain that the actual eliminations are always much larger than the figures indicate, as the officers frequently destroy such things as cheap and faulty measures, forgetting to make a return in the rush and preoccupation of their field work and incessant travelling.

There were only nine prosecutions, resulting in nine convictions and the collection of $170 in fines. Again the figures are almost critically small, but it has not yet become the policy of the department to prosecute each and every offence. Legally, an incorrect weight or measure is "false and unjust" and its use subject to prosecution, and in this connection some 18,384 weighing machines were rejected and some 23,665 weights adjusted—but the prosecution of all such cases would be by far too harsh a practice.

Other Activities of the Service

During the year thirteen new types of weighing machines, five gasolene dispensing devices and one fabric measuring machine were examined and approved for sale and use in Canada, when made in accordance with general Weights and Measures regulations and the special conditions pertaining to each machine as set down in the official certificate of approval covering each device. This work, of course, is done in the Weights and Measures Branch of the Department at Ottawa.

Four machines were refused certificates of admission, the results of the examination being too unsatifactory.

In addition, the distribution of gasolene and fuel oil by compartment tank wagons and the sale of oil in the modern glass bottle have been carefully studied and special regulations governing the inspection and use of both wagons and bottles have been prepared and established by Order in Council.

The relatively high co-efficient of expansion of gasolene still remains a serious problem in this industry, and the fruitful cause of many complaints and shortages. Incidentally, it represents but one of the many problems arising out of inherent physical properties that interfere with the weight and volume of commodites in transit, giving rise to discrepancies between shipping and receiving points, quite apart from the accuracy of the equipment used, and occasioning a good deal of trouble and investigation on the part of this Service.

Dominion Standard Yard

During the year an interesting examination and comparison of the Dominion Standard Yard, procured from England in 1874, was made by the physicists of the Topographical Surveys, Department of the Interior, in their Physical Testing Laboratory. That Surveys should have done this work and not Weights and Measures is due to the fact that following Confederation the latter service

was attached to the old Department of Inland Revenue, the Commissioner of Inland Revenue being, ex-officio, the head of the Weights and Measures Service. All necessary standards and equipment were procured from England under the certificate of the London Board of Trade, so that the scientific and laboratory side of Weights and Measures work remained undeveloped for a long period of years. Had precision measures of length and their comparison become a matter of public importance and demand, there is no doubt that the Weights and Measures Branch would have expanded and made provision for such work. But such was not the case, and Weights and Measures pre-occupation has been more or less confined to the supervision, control and inspection of the wide range of weighing and measuring equipment used for trade and industrial purposes and the general administration of the Weights and Measures Act.

The Survey Branches of the Government, however, have been exclusively interested in Measures of Length.

As a consequence, Topographical Surveys, to ensure the absolute accuracy and constancy of their survey rules and tapes, have developed and equipped a Physical Testing Laboratory with the finest metrological apparatus and controls, whilst Weights and Measures, lacking any such direct justification, has, rightly or wrongly, deemed it more expedient to co-operate with Topographical Surveys than to move in the direction of laboratory duplication and overlapping of work, believing that the ultimate co-ordination of the scientific branches of the Government departments under a Bureau of Standards would rectify any anomaly and reflection the existing situation might contain.

In its pursuit, then, of metrological standardization, Topographical Surveys this last year suggested a comparison of the Dominion Standard Yard in the custody of this department with their standards, to see what changes, if any, had taken place in its value since its purchase from England in 1874.

This work has been done and the results will issue in a special technical paper by the Topographical Surveys, but it is sufficient here to note that the Dominion Standard Yard shows remarkable accuracy and constancy, having been found standard within ·00003 inch.

Metrological work is possibly as intricate and comprehensive as any branch of modern science. The search after a natural constant as a reference of length has engaged metrologists since early times. The Pyramids are one expression of that search, the second's pendulum is another and the metre of the Metric System, based upon a meridian of the earth, is another. But none of these possessed the properties required in a natural constant as defined by Sir John Herschell in 1863, viz.:—

"Imperishable in its nature, unsusceptible to variation by lapse of time or decay and indestructible by accident or loss."

The solution, now, however, seems to have been found in the wave length of light, following researches on the part of Prof. A. A. Michelson of Chicago University in 1892. Research has since been centred upon perfecting the apparatus and use of this new natural constant, which seems to meet Sir John Herschell's requirements of "invariability, indestructibility and identical reproducibility," so that to-day the metre and the yard are defined in terms of the wave-length of red cadmium light, the latest values as determined from the observations of Messrs. Benoit, Fabry & Perot at the International Bureau of Weights and Measures, Sevres, France, in 1906, being as follows:—

Metre = 1,553,164·13 wave-lengths
Yard = 1,420,212·04 "

Since the wave-length is extremely small, being equal to ·00064 millimetre, it lends itself to the evaluation and comparison of the units of length with great accuracy, it being claimed that by using this new constant, the metre and the yard can be determined with an accuracy of one part in ten million.

Should this natural constant of the wave-length of light be finally adopted as the standard of reference, and this was suggested at the International Conference of Weights and Measures last year in France, but deferred for further research, metrologists and physicists will have found the object of their age-long search, an immaterial standard, constant in value, to which all material standards can be referred and in terms of which they can all be defined and inter-related.

The Metric System

During the fall of 1927, the International Bureau of Weights and Measures at Sevres, France, held its seventh sexennial conference. The bureau is maintained jointly by some thirty-one countries in the interest of the advancement of metrological science, the establishment of international scientific and technological standards, and as the repository of the International Standards of the Metric System.

As a contributing state, Canada was represented by the Deputy Warden of the Standards, London, England, as Canada's interest in the metric system is largely identifiable with that of Great Britian and the rest of the Empire. The scientific work discussed at the conference is a matter for specialists, but one essentially commercial proposal was advanced by the representatives of the Argentine and Mexico and this was that the United States and Great Britain should adopt the metric system "particularly in connection with agricultural machinery, grain handling plant and the like." The inference to be drawn is that the machinery in question supplied to the Argentine and Mexican markets is made to English measurements and is, therefore, not as suitable or acceptable as it should be for these metric countries. There is a lesson here for the Canadian manufacturer that he would do well to study and turn to profit by making and quoting all manufactured products for metric markets in the metric system. This does not necessarily mean redesigning or the duplication of any dies, jigs or plant machinery, but merely the conversion of dimensions into metric equivalents to the nearest millimetre, and the conversion of pounds weight into kilograms. A simple but very consequential detail in developing foreign markets.

APPENDIX A

STATEMENT of Weights and Measures Expenditure and Revenue for fiscal year ended March 31, 1928

Districts	District Inspector	Salaries	Special Assistance	Rent	Travel	Sundries	Total	Revenue
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
ONTARIO—								
Belleville	F. D. Diamond	7,955 00			4,086 01	428 16	12,469 17	13,218 25
Hamilton	A. E. Wheatley	10,635 00			6,413 89	310 64	17,359 53	23,148 85
London	A. A. Luton	12,549 68	90 00		6,156 84	289 98	19,086 50	22,052 20
Ottawa	E. H. Hinchey	19,321 29			8,880 81	323 00	28,525 10	26,597 35
Toronto	W. A. Fallowdown	16,598 64			5,281 30	488 18	22,368 12	52,857 45
Total for Ontario		67,059 61	90 00		30,818 85	1,839 96	99,808 42	137,874 10
QUEBEC—								
Montreal	A. A. Bernard	21,215 00			10,064 87	385 77	31,665 64	39,741 80
Quebec	J. A. W. LeBel	9,867 19			4,679 95	308 04	14,855 18	12,481 20
Sherbrooke	O. C. Delorme	6,705 00			2,352 59	353 03	9,410 62	14,652 45
Three Rivers	J. A. Desilets	6,512 48			3,281 35	212 72	10,006 55	8,101 05
Total for Quebec		44,299 67			20,378 76	1,259 56	65,937 99	74,976 50
NEW BRUNSWICK—								
St. John	W. F. Balcom	7,135 00			1,954 53	123 44	9,212 97	7,826 80
NOVA SCOTIA—								
Halifax	W. M. Dustan	6,433 33			3,149 18	404 60	9,987 11	8,796 75
P. E. ISLAND—								
Charlottetown	J. E. Trainor	1,750 00			549 40	41 80	2,341 20	2,180 65
MANITOBA—								
Winnipeg	J. B. Attridge	16,240 00			8,175 73	351 67	24,767 40	28,649 50
SASKATCHEWAN—								
Regina	E. B. Lorimer	12,940 00			7,553 74	312 34	20,806 08	23,523 18
Saskatoon	R. Wallace	7,689 52	120 00		7,071 81	237 04	15,118 37	23,204 20
Total for Saskatchewan		20,629 52	120 00		14,625 55	549 38	35,924 45	46,727 38
ALBERTA—								
Calgary	A. E. H. Cable	7,276 45			4,737 12	575 81	12,589 38	16,242 30
Edmonton	John McLeod	8,434 09			6,775 18	254 58	15,463 85	20,090 60
Total for Alberta		15,710 54			11,512 30	830 39	28,053 23	36,332 90
BRITISH COLUMBIA—								
Vancouver	A. H. Dutton	7,300 00		180 00	4,672 27	394 50	12,546 77	13,488 05
YUKON—								
Dawson	T. H. Shoebotham	375 00			184 67		559 67	98 15
Director, Ottawa	E. O. Way				151 40	152 63	304 03	
Superintendent, Eastern Division	D. J. McLean	3,130 00			276 55		3,406 55	
Superintendent Western Division	R. Wallace	3,100 00			396 05		3,496 05	
Elevator Scale Inspector	J. G. White	500 00			68 33		568 33	
Elevator Scale Inspector	A. A. Bowen	660 00			90 90		750 90	
Chief FactoryScale Inspector	C. F. Sheppard				54 15		54 15	
		7,390 00			1,037 38	152 63	8,580 01	
Total for Districts		194,322 67	210 00	180 00	97,058 62	5,947 93	297,719 22	356,950 78
General contingencies						1,449 84		
Printing general account						6,296 70		
Stationery general account						574 42		
International Bureau of Weights and Measures						154 37	8,475 33	
Weights and Measures Laboratory fees								2,422 35
Post Office inspection fees								2,500 00
Casual revenue								382 68
Total expenditure chargeable to Weights and Measures appropriation and total revenue							306,194 55	362,255 81
Less refunds chargeable to Weights and Measures revenue								13 00
							306,194 55	
Vote 535, flat salary increases to the Civil Service, less one month absorbed by Weights and Measures appropriation							11,470 00	
							317,664 55	362,242 81
Gratuities to relatives of deceased employees							1,290 00	
Printing of parliamentary and departmental publications							622 01	

APPENDIX B

RETURN showing the Number of Weights and Weighing Machines submitted in each Inspection District, during the Fiscal Year ended March 31, 1928

Inspection District	Weighing Machines																Weights				
			Platform Scales				Spring Scales			Computing Scales		Automatic Scales									
	Equal Arms	Steelyard	Ordinary	Pitless	Dial	Track	Trade	Ice and Dairy	Automatic Slot	Spring	All others	Grain Elevator	All others	Suspension Scales	Combined Avoirdupois and Metric	Metric	Avoirdupois	Troy	Metric	Tolerated	Tobacco
Belleville	565	104	3,359	.....	65	16	20	35	10	552	1,194	.....	2	5	.....	37	2,994	.....	94	.....	.....
Hamilton	749	5,305	5,244	10	305	46	14	6	80	846	2,297	.....	18	12	.....	.....	6,317	10	.....	.....	63
London	612	123	4,195	33	471	28	8	1	76	884	4,590	.....	2	62	.....	134	3,366	.....	148	.....	.....
Ottawa	1,557	70	10,301	2	139	33	47	21	61	2,208	1,947	.....	.....	32	.....	22	9,200	.....	19	.....	.....
Toronto	1,172	73	3,824	.....	360	32	72	2	268	3,143	3,774	.....	14	10	1	12	5,561	.....	24	.....	.....
ONTARIO	4,655	5,675	26,923	45	1,340	155	161	65	495	7,633	13,802	.....	36	121	1	205	27,438	10	285	.....	63
Montreal	3,504	824	10,204	53	344	45	212	6	304	2,646	5,305	.....	58	48	4	88	15,215	36	105	8	258
Quebec	960	320	3,752	1	20	15	20	.....	19	666	1,124	1	38	.....	.....	12	5,408	.....	18	266	267
Sherbrooke	540	2,874	9,071	104	37	16	4	18	926	11	936	2	.....	9	1	21	6,435	.....	18	.....	28
Three Rivers	609	162	2,913	7	236	18	11	.....	7	367	455	6	15	2	.....	.....	2,909	.....	.....	.....	.....
QUEBEC	5,713	4,180	25,940	165	637	94	247	24	1,256	3,690	7,820	9	111	59	5	121	29,967	36	141	274	553
St. John, N.B.	461	25	2,193	.....	62	22	47	.....	2	750	1,059	.....	9	27	.....	.....	2,063	.....	.....	.....	.....
Halifax, N.S.	412	42	1,984	.....	76	34	49	.....	2	1,211	1,450	.....	1	22	.....	.....	1,907	.....	.....	.....	.....
Charlottetown, P.E.I.	73	2	799	.....	14	3	13	.....	.....	142	229	.....	1	7	.....	.....	334	.....	.....	.....	.....
Winnipeg, Man.	938	638	6,676	55	285	31	166	33	99	2,473	2,222	16	10	29	.....	22	6,220	.....	40	.....	.....
Regina	399	1,204	6,149	17	28	25	16	.....	24	745	1,327	1	5	.....	.....	.....	2,351	.....	.....	.....	.....
Saskatoon	506	1,410	6,202	43	31	13	7	3	10	847	1,143	8	.....	6	.....	.....	2,691	.....	.....	.....	.....
SASKATCHEWAN	905	2,614	12,351	60	59	38	23	3	34	1,592	2,470	9	5	6	.....	.....	5,042	.....	.....	.....	.....
Calgary	440	740	3,949	34	56	36	41	.....	19	695	1,318	76	12	12	.....	.....	3,532	.....	.....	.....	.....
Edmonton	444	675	4,828	131	67	19	20	102	14	662	1,617	67	1	18	.....	171	4,024	.....	175	.....	.....
ALBERTA	884	1,415	8,777	165	123	55	61	102	33	1,357	2,935	143	13	30	.....	171	7,556	.....	175	.....	.....
Vancouver, B.C.	623	266	3,567	12	71	36	293	49	23	1,616	2,210	12	4	42	.....	.....	2,993	.....	.....	.....	.....
Yukon, N.W.T.	3	3	68	.....	.....	2	1	.....	.....	9	1	.....	.....	.....	.....	.....	18	.....	.....	.....	.....
Totals	14,567	14,860	89,278	502	2,667	470	1,061	279	1,944	20,473	34,198	189	190	343	6	519	83,538	46	641	274	616

APPENDIX B—Continued

RETURN showing the Number of Weights and Weighing Machines Verified in each Inspection District during the Fiscal Year ended March 31, 1928

Inspection District	Weighing Machines																Weights				
			Platform Scales				Spring Scales			Computing Scales		Automatic Scales									
	Equal Arms	Steelyard	Ordinary	Pitless	Dial	Track	Trade	Ice and Dairy	Automatic Slot	Spring	All others	Grain Elevator	All others	Suspension Scales	Combined Avoirdupois and Metric	Metric	Avoirdupois	Troy	Metric	Tolerated	Tobacco
Belleville	483	66	2,126	.....	36	2	17	35	8	452	1,013	.....	2	4	.....	33	2,576	.....	92	.....	.....
Hamilton	619	5,263	3,853	9	185	12	6	6	24	562	1,717	.....	15	8	.....	.....	6,154	10	.....	.....	63
London	588	112	3,497	22	427	15	4	1	59	804	4,327	.....	2	60	.....	133	3,275	.....	148	.....	.....
Ottawa	1,492	57	9,316	1	106	17	41	21	49	1,919	1,692	.....	.....	25	.....	22	9,196	.....	19	.....	.....
Toronto	1,159	68	3,485	.....	307	17	71	2	229	3,039	3,482	.....	12	8	1	12	5,548	.....	24	.....	.....
ONTARIO	4,341	5,566	22,277	32	1,061	63	139	65	369	6,776	12,231	.....	31	105	1	200	26,749	10	283	.....	63
Montreal	3,202	724	8,388	37	282	34	195	6	248	2,163	4,439	.....	57	41	3	86	15,035	36	105	8	258
Quebec	948	319	3,719	1	20	14	20	.....	19	656	1,108	1	38	.....	.....	12	5,338	.....	18	266	267
Sherbrooke	537	2,860	9,031	94	33	15	4	18	926	11	936	2	.....	9	1	21	6,435	.....	18	.....	28
Three Rivers	595	153	2,498	5	203	15	11	.....	3	353	419	6	15	1	.....	.....	2,909	.....	.....	.....	.....
QUEBEC	5,282	4,056	23,636	137	538	78	230	24	1,196	3,183	6,902	9	110	51	4	119	29,717	36	141	274	553
St. John, N.B.	449	22	1,944	.....	55	16	46	.....	2	706	1,006	.....	9	24	.....	.....	2,055	.....	.....	.....	.....
Halifax, N.S.	396	40	1,875	.....	74	32	48	.....	1	1,153	1,376	.....	1	31	.....	.....	1,839	.....	.....	.....	.....
Charlottetown, P.E.I.	70	2	702	.....	13	3	13	.....	.....	142	216	.....	1	6	.....	.....	334	.....	.....	.....	.....
Winnipeg, Man.	923	634	6,221	41	235	24	127	33	76	2,319	2,075	16	10	26	.....	22	6,214	.....	40	.....	.....
Regina	372	1,182	5,566	11	24	14	12	.....	19	697	1,243	1	5	.....	.....	.....	2,347	.....	.....	.....	.....
Saskatoon	471	1,393	5,676	33	29	12	6	3	6	802	1,027	8	.....	3	.....	.....	2,666	.....	.....	.....	.....
SASKATCHEWAN	843	2,575	11,242	44	53	26	18	3	25	1,499	2,270	9	5	3	.....	.....	5,013	.....	.....	.....	.....
Calgary	427	727	3,512	22	42	21	39	.....	14	660	1,251	72	12	10	.....	.....	3,499	.....	.....	.....	.....
Edmonton	431	658	3,927	86	53	11	20	102	7	609	1,486	65	1	13	.....	154	3,582	.....	166	.....	.....
ALBERTA	858	1,385	7,439	108	95	32	59	102	21	1,269	2,737	137	13	23	.....	154	7,081	.....	166	.....	.....
Vancouver, B.C.	608	258	3,169	11	53	29	264	49	19	1,452	1,985	12	4	40	.....	.....	2,952	.....	.....	.....	.....
Yukon, N.W.T.	3	3	68	.....	.....	2	1	.....	.....	9	1	.....	.....	.....	.....	.....	18	.....	.....	.....	.....
Totals	13,773	14,541	78,573	373	2,177	305	945	279	1,709	18,508	30,799	183	184	299	5	495	81,972	46	630	274	616

APPENDIX B—Concluded

RETURN showing the Number of Weights and Weighing Machines Rejected in each Inspection District during the Fiscal Year ended March 31, 1928

Inspection District	Weighing Machines																Weights				
			Platform Scales				Spring Scales			Computing Scales		Automatic Scales									
	Equal Arms	Steelyard	Ordinary	Pitless	Dial	Track	Trade	Ice and Dairy	Automatic Slot	Spring	All others	Grain Elevator	All others	Suspension Scales	Combined Avoirdupois and Metric	Metric	Avoirdupois	Troy	Metric	Tolerated	Tobacco
Belleville	82	38	1,233	.....	29	14	3	.....	2	100	181	.....	.....	1	.....	4	418	.....	2	.....	.....
Hamilton	130	42	1,391	1	120	34	8	.....	56	284	580	.....	3	4	.....	.....	163	.....	.....	.....	.....
London	24	11	698	11	44	13	4	.....	17	80	263	.....	.....	2	.....	1	91	.....	.....	.....	.....
Ottawa	65	13	985	1	33	16	6	.....	12	289	255	.....	.....	7	.....	.....	4	.....	.....	.....	.....
Toronto	13	5	339	.....	53	15	1	.....	39	104	292	.....	2	2	.....	.....	13	.....	.....	.....	.....
ONTARIO	314	109	4,646	13	279	92	22	.....	126	857	1,571	.....	5	16	.....	5	689	.....	2	.....	.....
Montreal	302	100	1,816	16	62	11	17	.....	56	483	866	.....	1	7	1	2	180	.....	.....	.....	.....
Quebec	12	1	33	.....	.....	1	.....	.....	.....	10	16	.....	.....	.....	.....	.....	70	.....	.....	.....	.....
Sherbrooke	3	14	40	10	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Three Rivers	14	9	415	2	33	3	.....	.....	4	14	36	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
QUEBEC	331	124	2,304	28	99	16	17	.....	60	507	918	.....	1	8	1	2	250	.....	.....	.....	.....
St. John, N. B	12	3	249	.....	7	6	1	.....	.....	44	53	.....	.....	3	.....	.....	8	.....	.....	.....	.....
Halifax, N.S	16	2	109	.....	2	2	1	.....	1	58	74	.....	.....	1	.....	.....	68	.....	.....	.....	.....
Charlottetown, P.E.I	3	.....	97	.....	1	.....	.....	.....	.....	.....	13	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Winnipeg, Man	15	4	455	14	50	7	39	.....	23	154	147	.....	.....	3	.....	.....	6	.....	.....	.....	.....
Regina	27	22	583	6	4	11	4	.....	5	48	84	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
Saskatoon	35	17	526	10	2	1	1	.....	4	45	116	.....	.....	3	.....	.....	25	.....	.....	.....	.....
SASKATCHEWAN	62	39	1,109	16	6	12	5	.....	9	93	200	.....	.....	3	.....	.....	29	.....	.....	.....	.....
Calgary	13	13	437	12	14	15	2	.....	5	35	67	4	.....	2	.....	.....	33	.....	.....	.....	.....
Edmonton	13	17	901	45	14	8	.....	.....	7	53	131	2	.....	5	.....	17	442	.....	9	.....	.....
ALBERTA	26	30	1,338	57	28	23	2	.....	12	88	198	6	.....	7	.....	17	475	.....	9	.....	.....
Vancouver, B.C	15	8	398	1	18	7	29	.....	4	164	225	.....	.....	2	.....	.....	41	.....	.....	.....	.....
Totals	794	319	10,705	129	490	165	116	.....	235	1,965	3,399	6	6	44	1	24	1,566	.....	11	.....	.....

APPENDIX C

RETURN showing the Number of Measures of Capacity, Measuring Devices, Lineal Measures and Miscellaneous submitted in each Inspection District, during the Fiscal Year ended March 31, 1928

Inspection District	Measures of Capacity			Measuring Devices						Lineal Measures		Miscellaneous									
	Dominion	Milk Cans	Ice Cream Containers	S.M. Pumps	Combined Pump and Visible	Visible	Measuring Tanks	Meter Pumps	Meters	Dominion	Metric	Personal Weigher	Moisture Test Scales	Miner's Attachment	Tipple Scales	Weighto-graphs	Totalizers	Salt Carts and Tubs	Fabric Measures	Measuring Bowls	Tank Wagon
Belleville	2,953	.....	.....	771	19	795	.....	.....	.....	104	.....	11	.....	.....	.....	.....	.....	.....	9	29	.....
Hamilton	11,379	943	126	576	22	1,043	.....	.....	.....	668	.....	.....	.....	.....	.....	.....	.....	.....	14	7	9
London	12,186	4,549	2,224	605	25	1,462	27	.....	.....	1,091	.....	15	.....	.....	.....	2	.....	.....	.....	11	8
Ottawa	4,332	342	.....	1,330	16	976	.....	.....	.....	9	..	8	.....	.....	.....	.....	.....	.....	34	.....	13
Toronto	17,544	71,764	36,995	1,946	30	6,318	.....	.....	141	106	.....	865	.....	.....	.....	.....	.....	.....	108	.....	120
ONTARIO	48,394	77,598	39,345	5,228	112	10,594	27	.....	114	1,978	.....	899	.....	.....	.....	2	.....	.....	165	47	150
Montreal	20,515	6,668	.....	1,936	8	1,135	4	.....	.....	1,728	.....	144	.....	.....	.....	.....	.....	.....	80	.....	7
Quebec	8,251	.....	.....	621	.....	426	1	.....	.....	1,222	.....	12	.....	.....	.....	.....	.....	.....	17	.....	.....
Sherbrooke	1,125	.....	.....	441	13	424	.....	.....	.....	272	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Three Rivers	2,315	.....	918	192	6	366	.....	.....	.....	273	.....	.....	.....	1	.....	.....	3	.....	.....	.....	.....
QUEBEC	32,206	6,668	918	3,190	27	2,351	5	.....	.....	3,495	.....	156	.....	1	.....	.....	3	.....	97	.....	7
St. John, N.B.	2,542	322	.....	795	.....	383	.....	.....	.....	.....	.....	3	.....	.....	.....	5	.....	.....	.....	.....	.....
Halifax, N.S.	1,328	.....	.....	664	60	369	.....	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	72	.....	.....	.....
Charlottetwn, P.E.I.	672	.....	.....	251	6	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnipeg, Man.	2,997	.....	.....	1,560	8	817	7	.....	.....	896	.....	88	.....	.....	.....	.....	.....	.....	101	.....	10
Regina	769	.....	.....	1,301	.....	720	.....	.....	.....	349	.....	.....	.....	2	.....	.....	.....	.....	21	.....	4
Saskatoon	326	.....	.....	956	17	661	.....	.....	.....	98	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....
SASKATCHEWAN	1,095	.....	.....	2,257	17	1,381	.....	.....	.....	447	.....	.....	.....	2	.....	.....	.....	.....	24	.....	4
Calgary	1,291	623	.....	772	14	505	4	.....	.....	274	.....	6	.....	19	.....	.....	.....	.....	11	.....	1
Edmonton	3,164	1,431	.....	1,106	4	682	7	.....	.....	395	.....	1	.....	4	13	.....	.....	.....	2	.....	12
ALBERTA	4,455	2,054	.....	1,878	18	1,187	11	.....	.....	669	.....	7	.....	23	13	.....	.....	.....	13	.....	13
Vancouver, B.C.	581	125	.....	1,103	1	336	22	.....	1	2	.....	57	7	.....	.....	.....	.....	.....	67	3	.....
Totals	94,270	86,767	40,236	16,926	249	17,487	72	.....	115	7,487	.....	1,210	.....	50	13	7	3	72	467	51	184

APPENDIX C—Continued

RETURN showing the Number of Measures of Capacity, Measuring Devices, Lineal Measures and Miscellaneous Verified in each Inspection District during the Fiscal Year ended March 31, 1928

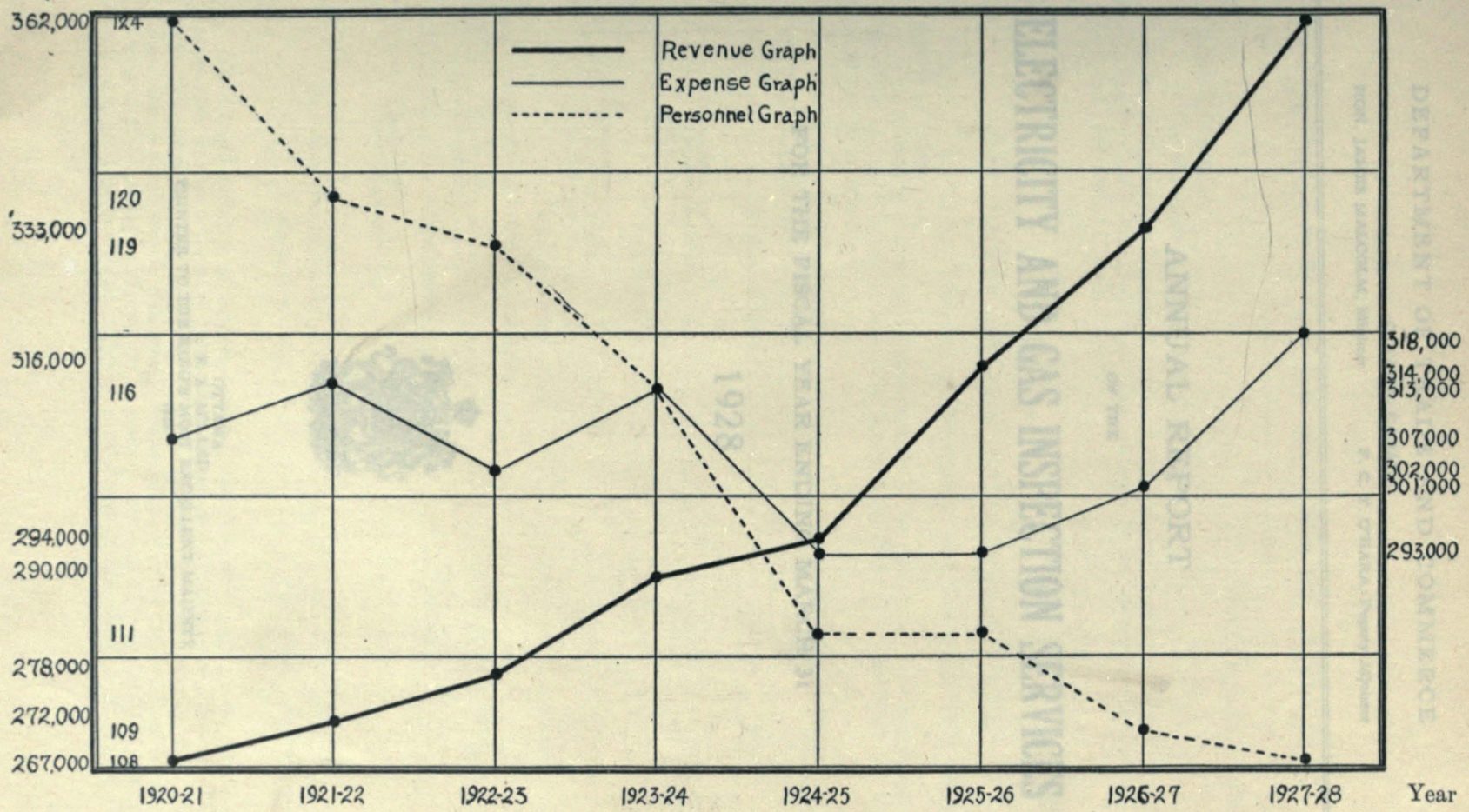
Inspection District	Measures of Capacity			Measuring Devices						Lineal Measures		Miscellaneous									
	Dominion	Milk Cans	Ice Cream Containers	S.M. Pumps	Combined Pump and Visible	Visible	Measuring Tanks	Meter Pumps	Meters	Dominion	Metric	Personal Weigher	Moisture Test Scales	Miner's Attachment	Tipple Scales	Weighto-graphs	Totalizers	Salt Carts and Tubs	Fabric Measures	Measuring Bowls	Tank Wagon
Belleville	2,938			647	16	616				104		11							7	25	
Hamilton	11,312	943	126	467	7	861				647									14	7	9
London	12,185	4,549	2,224	513	19	1,130	26			1,091		15				2				11	8
Ottawa	4,321	337		1,224	11	822				9		8							33		13
Toronto	17,532	71,734	36,995	1,921	23	6,237			114	106		862							105		120
ONTARIO	48,288	77,563	39,345	4,772	76	9,666	26		114	1,957		896				2			159	43	150
Montreal	20,505	6,668		1,783	8	1,006	2			1,727		144							74		
Quebec	8,250			608		414	1			1,222		12							17	1	
Sherbrooke	1,125			429	10	424				272											
Three Rivers	2,315		918	182	4	335				273				1			1				
QUEBEC	32,195	6,668	918	3,002	22	2,179	3			3,494		156		1			1		91	1	7
St. John, N.B.	2,542	322		733		368						3				5					
Halifax, N.S.	1,326			656	59	359								17				72			
Charlottetown, P.E.I.	663			226	6	67															
Winnipeg, Man.	2,989			1,489	7	756	7			896		88							85		10
Regina	764			1,197		668				349				1					18		4
Saskatoon	326			895	16	612				98									3		
SASKATCHEWAN	1,090			2,092	16	1,280				447				1					21		4
Calgary	1,289	592		744	14	470	4			274		5		15					11		1
Edmonton	3,135	1,431		946	4	600	7			395		1		4					2		12
ALBERTA	4,424	2,023		1,690	18	1,070	11			669		6		19	11				13		13
Vancouver, B.C.	581	125		897	1	305	22		1	2		57		7					63	3	
Totals	94,098	86,701	40,263	15,557	205	16,050	69		115	7,465	1,206		45	11	7	1	72	432	47		184

APPENDIX C—Concluded

RETURN showing the Number of Measures of Capacity, Measuring Devices, Lineal Measures and Miscellaneous Rejected in each Inspection District during the Fiscal Year ended March 31, 1928

Inspection District	Measures of Capacity			Measuring Devices						Lineal Measures		Miscellaneous									
	Dominion	Milk Cans	Ice Cream Containers	S.M. Pumps	Combined Pump and Visible	Visible	Measuring Tanks	Meter Pumps	Meters	Dominion	Metric	Personal Weigher	Moisture Test Scales	Miner's Attachment	Tipple Scales	Weighto-graphs	Totalizers	Salt Carts and Tubs	Fabric Measures	Measuring Bowls	Tank Wagon
Belleville	15			124	3	179													2	4	
Hamilton	67			109	15	182				21											
London	1			92	6	332	1														
Ottawa	11	5		106	5	154													1		
Toronto	12	30		25	7	81						3							3		
ONTARIO	106	35		456	36	928	1			21		3							6	4	
Montreal	10			153		129	2			1									6		
Quebec	1			13		12															
Sherbrooke				12	3																
Three Rivers				10	2	31											2				
QUEBEC	11			188	5	172	2			1							2		6		
St. John, N.B.				62		15															
Halifax, N.S.	2			8	1	10															
Charlottetown, P.E.I.	9			25		2															
Winnipeg, Man.	8			71	1	61													16		
Regina	5			104		52								1							
Saskatoon				61	1	49															
SASKATCHEWAN	5			165	1	101								1							
Calgary	2	31		28		35						1		4					3		
Edmonton	29			160		82									2						
ALBERTA	31	31		188		117						1		4	2				3		
Vancouver, B.C.				206		31													4		
Totals	172	66		1,369	44	1,437	3			22		4		5	2		2		35	4	

WEIGHTS AND MEASURES REVENUE AND EXPENSE CHART, 1921 TO 1928



DEPARTMENT OF TRADE AND COMMERCE

OTTAWA, CANADA

HON. JAMES MALCOLM, Minister F. C. T. O'HARA, Deputy Minister

ANNUAL REPORT

OF THE

ELECTRICITY AND GAS INSPECTION SERVICES

FOR THE FISCAL YEAR ENDING MARCH 31

1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

REPORT

OF THE

INSPECTION OF ELECTRICITY AND GAS

OTTAWA, July 6, 1928.

To the Honourable
The Minister of Trade and Commerce.

SIR,—I have the honour to submit the annual report on the Electricity and Gas Inspection Services, and also statements in connection therewith, for the fiscal year ended March 31, 1928.

F. C. T. O'HARA,
Deputy Minister.

ELECTRICITY AND GAS INSPECTION SERVICES

Mr. J. L. Stiver, Director of Electricity and Gas Inspection services, reports as follows:—

The following comparative statement for the past two years regarding the activities of the Electricity and Gas Inspection Branch shows that the work continues to increase:—

	1926–27	1927–28
Electricity and Gas Inspection Acts—		
Electricity meters tested	283,297	293,325
Gas meters tested	109,196	122,684
Total meters tested	392,493	416,009
Revenue—		
Electricity inspection	$ 180,865 95	$ 189,581 45
Gas inspection	76,890 20	85,715 60
Total revenue	$ 257,756 15	$ 275,297 05
Expenditure—		
Electricity inspection	$ 121,585 92	$ 146,189 40
Gas inspection	52,875 53	52,839 44
Total expenditure	$ 174,461 45	$ 199,028 84
Electricity and Fluid Exportation Act—		
Revenue—		
Export tax	$ 357,421 89	$ 373,676 21
License fees	650 50	675 00
Total revenue	$ 358,082 39	$ 374,351 21
Expenditure—		
Travelling expenses	$ 258 46	$ 440 59
Total revenue for branch	$ 615,828 54	$ 649,648 26
Total expenditure for branch	175,833 18	199,469 43
Surplus	$ 439,995 36	$ 450,188 83

The total number of meters tested under the authority of the Electricity Inspection Act and the Gas Inspection Act was 416,009, an increase of 23,516 over the previous year and the increase in revenue amounted to $17,540.90. There was a considerable increase in expenditure due to the purchase of several instruments to replace old ones and a general increase in the salaries of the entire staff and as a consequence there is a decrease in the surplus of $6,026.49 as

compared with the previous year. The surplus for this year, which does not take into account rent, fuel, furniture and the salaries of the officers in the Ottawa laboratory, was $76,268.21.

In order that a clear conception may be obtained of the increase in the work of the Electricity and Gas Inspection Services a chart has been prepared which shows at a glance the increase in the number of meters tested in the past fifteen years. It may be seen that the number of meters tested during 1928 is slightly more than double the number of meters tested in 1913. Curves number 1, 2 and 3 are for the Electricity Inspection Service and curves number 1a, 2a and 3a are for the Gas Inspection Service. Curve number 4 shows the total number of meters tested. Previous to 1920 no record was kept of new meters. Considerable information may be obtained from a study of these curves but the obtaining of same is left to those most interested.

For purposes of administration the Dominion of Canada is divided into twenty districts and three divisions. The districts are as follows: Charlottetown, in Prince Edward Island; Halifax, in Nova Scotia; St. John, in New Brunswick; Quebec, Three Rivers, Montreal, in Quebec; Ottawa, Belleville, Toronto, Hamilton, London, Sudbury, Fort William, in Ontario; Winnipeg, in Manitoba; Regina, in Saskatchewan; Calgary, Edmonton, in Alberta; Nelson, Vancouver, Victoria in British Columbia.

The three divisions are: (1) Eastern, which is composed of the districts in Prince Edward Island, Nova Scotia, New Brunswick, Quebec and Ontario with the exception of the district of Fort William. (2) Central, which is composed of the district of Fort William and the districts in Manitoba and Saskatchewan. (3) Western, which is composed of the districts in Alberta and British Columbia.

Gas Inspection Service

The falling off in the gas inspection work during 1926-27 was more than balanced this year, the increase in the number of meters tested being 13,488. This increase is due to the increase in the number of new meters that were tested, there being 41,628 this year as compared with 27,305 last year.

The number of gas meters in use on March 31, 1928, on manufactured gas was 482,433, an increase of 19,937 over the previous year.

Manufactured gas continues to be used in increasing quantities. During the fiscal year just closed 16,052,836,000 cubic feet of gas were sold, as compared with 15,227,161,097 the previous year, an increase of 725,675,000 cubic feet.

The total production of natural gas has increased very rapidly during the past two years, 20,350,000,000 cubic feet having been sold, as compared with 17,863,000,000 cubic feet sold during 1926-27 and 13,000,000,000 during 1925-26.

The total number of meters measuring natural gas on March 31st, 1928, was 98,915.

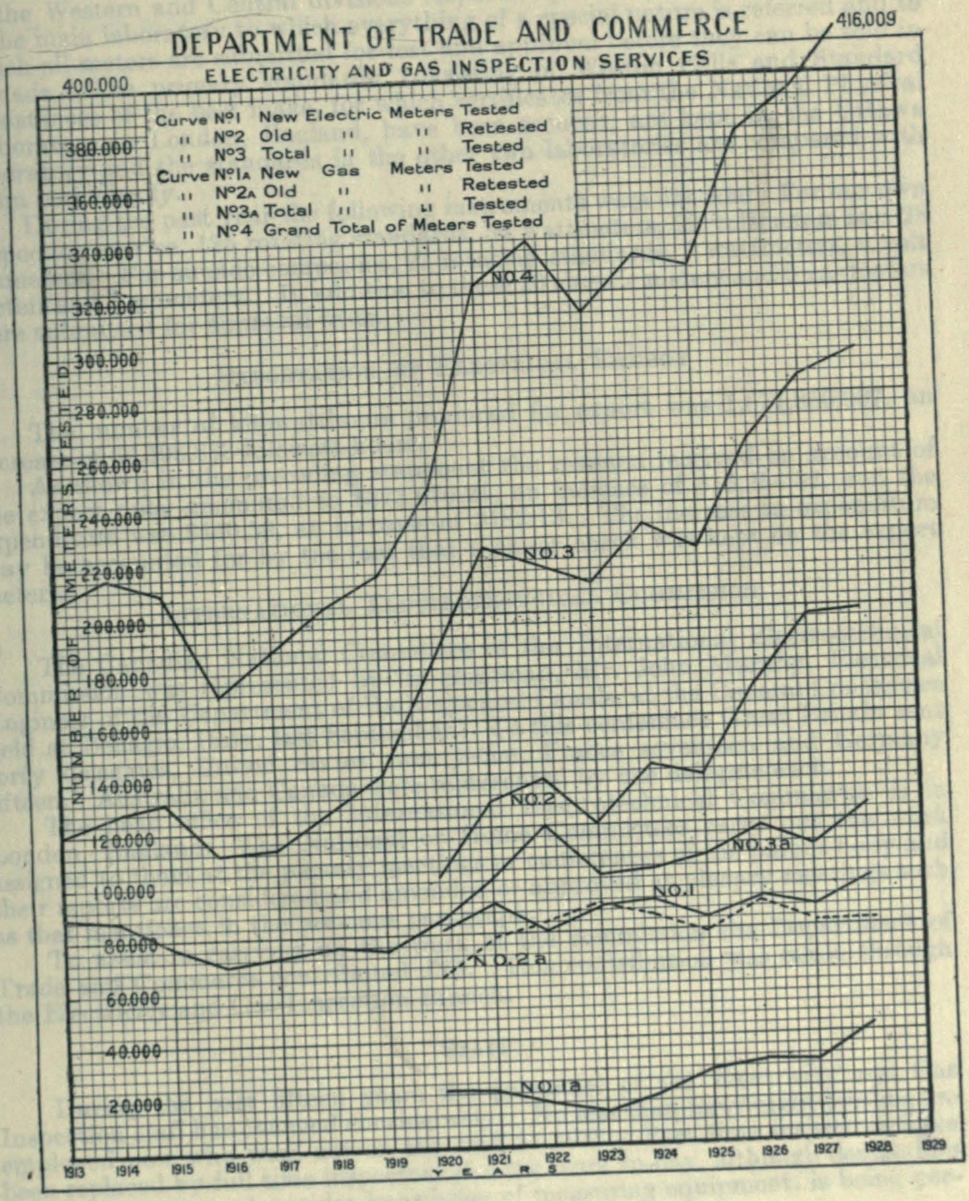
Electricity Inspection Service

The work connected with the Electricity Inspection Service continues to grow. There were 293,325 meters tested during the year, an increase of 10,028 over the previous year. The number of new meters tested increased from 85,946 to 95,496 and the total number of meters in service on March 31st, 1928, was 1,423,078, an increase of 97,415.

Applications for certificate of registration covering over 1,800 places in which electrical energy is sold were received and the certificates issued.

Laboratories

The work of the laboratories forms a very important part of the work of the Electricity and Gas Inspection Services. All instruments and apparatus


DEPARTMENT OF TRADE AND COMMERCE
ELECTRICITY AND GAS INSPECTION SERVICES
416,009
Curve No1 New Electric Meters Tested
" No2 Old " " Retested
" No3 Total " " Tested
Curve No1A New Gas Meters Tested
" No2A Old " " Retested
" No3A Total " " Tested
" No4 Grand Total of Meters Tested
NO.4
NO.3
NO.2
NO.3A
NO.1
NO.2a
NO.1a
NUMBER OF METERS TESTED
400.000
380.000
360.000
340.000
320.000
300.000
280.000
260.000
240.000
220.000
200.000
180.000
160.000
140.000
120.000
100.000
80.000
60.000
40.000
20.000
1913
1914
1915
1916
1917
1918
1919
1920
1921
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1926
1927
1928
1929
YEARS

used for inspection work are sent to these laboratories regularly for test and calibration in order to ensure that the highest degree of accuracy may be maintained.

The laboratories at Vancouver and Winnipeg take care of the instruments in the Western and Central divisions respectively. The laboratory at Ottawa is the main laboratory to which everything of a special nature is referred and to which all meters are submitted for test and approval before they can be sold in Canada. The primary standards, consisting of Weston Cells and Standard Resistances of the best make, for which certificates from the National Physical Laboratory in London, England, have been secured, are kept in the Ottawa laboratory and the standards in the other two laboratories are compared with them periodically.

During the past year the following instruments were checked: For our own inspection service, 125 rotating standards, 54 wattmeters, 29 voltmeters and 28 ammeters. For outside companies, 27 rotating standards, 7 wattmeters, 9 volt meters and 7 ammeters. In addition to these 20 electric meters and 6 gas meters were submitted for approval tests.

Exportation of Electrical Energy

The number of kilowatthours produced for export was 1,674,856,007, an increase of 66,198,833 kilowatt hours.

As shown in the preceding statement the revenue received on account of the export duty amounted to $373,676.21, an increase of $16,254.32, and the expenditure was $440.59, an increase of $182.13. The increase in expenditure may be accounted for by the fact that a closer check was kept on the export meters.

International Electrotechnical Commission

The Canadian National Committee of the International Electrotechnical Commission was represented by its chairman, Mr. John Murphy, Electrical Engineer of the Department of Railways and Canals, at the General Conference held at Bellagio, Italy, last September. To this conference Great Britain sent forty delegates, United States twenty-one, France seventeen and Germany fifteen. Australia and Canada were represented by one delegate each.

The head office of the International Electrotechnical Commission is in London, England. The National or Home Committees carry out the work assigned to them at the plenary meetings or conferences of the parent body and their reports are considered and amended or approved at plenary meetings such as that mentioned in the previous paragraph.

To assist in carrying on the work of the commission the Department of Trade and Commerce contributed £75. This contribution was made through the Electricity and Gas Inspection Branch.

Staff

During the past fifteen years the personnel of the Electricity and Gas Inspection staff has changed considerably. No less than forty-eight persons are employed now who were not on the staff in 1913. Part time inspectors have been replaced by full time inspectors and the work to-day, although demanding greater accuracy and a wider knowledge of measuring equipment, is being performed better and more efficiently than ever before.

During the past year the class of senior inspector was created for the benefit of the inspectors doing the more advanced work in the larger offices, and as a result fourteen inspectors were promoted to this class. In addition two inspectors were promoted to the position of district inspector and four permanent appointments and one temporary appointment were made. Two resignations were accepted and one death occurred.

APPENDIX A

STATEMENT of Electricity Expenditure and Revenue for the fiscal year ended March 31, 1928

District	District Inspector	Salary	Special Assistance	Stationery	Travel	Sundries	Total	Revenue
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
ONTARIO—								
Belleville	W. H. Middleton	5,885 00		102 69	1,833 60	142 99	7,964 28	5,967 35
Fort William	E. Little	2,225 00		47 09	325 80	102 47	2,700 36	2,452 35
Hamilton	H. H. Wilson			227 66	1,303 83	194 61	1,726 10	13,744 85
London	J. C. Smith	8,300 00		271 07	2,557 80	190 97	11,319 84	15,793 10
Ottawa	J. A. Ham	9,365 00		477 74	1,495 45	249 92	11,588 11	9,696 05
Sudbury	L. H. Bouskill	2,225 00		63 00	424 11	104 49	2,816 60	3,172 65
Toronto	S. F. Johnstone	18,640 32		822 26	1,910 15	409 89	21,782 62	31,629 65
Total for Ontario		46,640 32		2,011 51	9,850 74	1,395 34	59,897 91	82,456 00
QUEBEC—								
Montreal	R. J. Chevrier			624 44	2,437 52	403 08	3,465 04	37,586 60
Quebec	J. A. Cantin	3,155 00		164 12	1,933 25	200 46	5,452 83	7,665 10
Three Rivers	A Olivier	3,575 00		37 19	389 65	71 30	4,073 14	3,597 30
Totals for Quebec		6,730 00		825 75	4,760 42	674 84	12,991 01	48,849 00
NEW BRUNSWICK—								
St. John	R. P. Fortin	4,055 00		111 07	305 41	48 81	4,520 29	3,060 70
NOVA SCOTIA—								
Halifax	S. W. Withers	3,660 00		73 50	756 58	100 88	4,590 96	4,580 85
P. E. ISLAND—								
Charlottetown	R. E. Palmer	711 21			155 35	14 49	881 05	485 55
MANITOBA—								
Winnipeg	F. C. Babington			273 14	942 85	164 77	1,380 76	15,746 15
SASKATCHEWAN—								
Regina	Louis Weber	3,780 00		113 53	1,522 15	270 70	5,686 38	7,684 05
ALBERTA—								
Calgary	W. P. Kyle	6,327 33		98 26	1,215 85	506 19	8,147 63	5,031 40
Edmonton	A. J. Cantin	3,995 00		7 54	607 07	278 93	4,888 54	3,183 25
Totals for Alberta		10,322 33		105 80	1,822 92	785 12	13,036 17	8,214 65
BR. COLUMBIA—								
Nelson	H. B. Penny	2,225 00		68 91	470 10	123 17	2,887 18	2,035 80
Vancouver	G. T. Scouler	9,690 00		236 53	401 67	219 02	10,547 22	13,509 05
Victoria	E. H. Ruttan			69 83	202 45	130 12	402 40	2,797 40
Totals for British Columbia		11,915 00		375 27	1,074 22	472 31	13,836 80	18,342 25
Director	J. L. Stiver				397 12	204 33	601 45	
Supt., East. Div.	H. M. Clark	2,570 00			670 58	3 57	3,244 15	
Supt., Cent. Div.	S. N. Hart	2,870 00			317 75	157 58	3,345 33	
Supt., West. Div.	J. Stott	3,185 00			350 05	217 54	3,752 59	
		8,625 00			1,735 50	583 02	10,943 52	
		96,438 86		3,889 57	22,926 14	4,510 28	127,764 85	189,419 20

General contingencies	2,981 08		
Equipment	7,057 40		
Printing	3,038 73		
Stationery	502 29		
Government publications	30 10		
International Electrotechnical Commission	364 95	13,974 55	
Electrical Standard Laboratory fees			162 25
Total expenditure from appropriation		141,739 40	
Vote 585. Flat salary increase to the Civil Service		4,450 00	
		146,189 40	189,581 45
Electricity and Fluid Exportation Act		440 59	373,676 21
Export license fees			675 00
Gratuities to Relatives of deceased employees		150 00	
Printing of parliamentary and departmental publications		235 98	

APPENDIX B

STATEMENT of Gas Expenditure and Revenue for the fiscal year ended March 31, 1928

District	District Inspector	Salaries	Special Assistance	Travel	Sundries	Total	Revenue
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
ONTARIO—							
Belleville	W. H. Middleton						2,391 40
Hamilton	H. H. Wilson	9,763 23		771 77	4 40	10,539 40	8,671 40
London	J. C. Smith			280 33	101 61	381 94	8,362 60
Ottawa	J. A. Ham						3,122 00
Sudbury	L. H. Bouskill			16 80		16 80	159 00
Toronto	S. F. Johnstone			34 95	42 52	77 47	24,447 80
Totals for Ontario		9,763 23		1,103,85	148 53	11,015 61	47,154 20
QUEBEC—							
Montreal	R. J. Chevrier	24,998 35		520 86	153 07	25,672 28	19,935 60
Quebec	J. A. Cantin						1,501 60
Totals for Quebec		24,998 35		520 86	153 07	25,672 28	21,437 20
NEW BRUNSWICK—							
St. John	R. P. Fortin			161 25	25 30	186 55	1,283 80
NOVA SCOTIA—							
Halifax	S. W. Withers						639 60
MANITOBA—							
Winnipeg	F. C. Babington	9,630 00				9,630 00	4,006 20
ALBERTA—							
Calgary	W. P. Kyle						3,773 00
Edmonton	A. J. Cantin						684 60
Totals for Alberta							4,457 60
BRITISH COLUMBIA—							
Nelson	H. B. Penny						109 80
Vancouver	G. T. Scouler						5,774 20
Victoria	E. H. Ruttan	4,055 00				4,055 00	853 00
Totals for British Columbia		4,055 00				4,055 00	6,737 00
Totals for Districts		48,446 58		1,785 96	326 90	50,559 44	85,715 60
Vote 535. Flat salary increase to the Civil Service						2,280 00	
						52,839 44	85,715 60

APPENDIX C

Manufactured Gas Companies Registered and Gas Tests Made

District	Company	Kind of Gas	Number of Meters	Class of Company	Calorific Tests Standard: 450 B.T.U.'s per cubic foot					Number of times below standard value
					Number of Tests		B.T.U. values found			
					Prescribed	Made	Highest	Lowest	Average	
Belleville	Port Hope Gas Company	Coal	425	5	24	24	560	473	508·6	0
	Hydro-Electric Power Commission of Cobourg	Coal	370	5	24	24	552	450	475·8	0
	Belleville Gas Department	C. & C.W.	1,226	4	48	48	468	448	456·1	1
	Hydro-Electric Power Commission of Oshawa	C.W.	1,345	4	48	48	469	451	454·7	0
	Hydro-Electric Power Commission of Peterboro	C.W.	3,149	3	96	96	472	451	459·0	0
	Corporation of Brockville	C.W.	2,022	3	96	96	592	510	548·1	0
	Corporation of Kingston	C.W.	3,950	3	96	96	562	471	523·8	0
Halifax	Nova Scotia Tramways and Power Company	Coal	2,716	3	96	96	516	450	485·9	0
Hamilton	United Gas and Fuel Company	Coal	23,500	1	300	300	577	521	549·7	0
	Kitchener Public Utilities	C. & C.W.	4,817	3	96	96	509	450	469·3	0
	Public Utilities Commission of Waterloo	C.W.	1,012	.....	.....	.....	.....	.....	.....	
London	City Gas Company, London	C. & C.W.	12,983	1	300	300	585	461	516·2	0
	St. Thomas Gas Department	C. & C.W.	3,346	3	96	96	600	464	540·3	0
	Stratford Gas Department	C. & C.W.	862	5	24	24	588	467	529·1	0
Montreal	Montreal Light, Heat and Power Consolidated	C. & C.W.	167,439	1	300	300	489	450	469·3	0
	Corporation of Sherbrooke	C.W.	2,123	3	96	96	507	458	487·3	0
Nelson	Corporation of Nelson	Coal	620	5	24	24	476	450	459·8	0
Ottawa	The Ottawa Gas Company	Coal	17,662	1	300	300	524	480	500·1	0
	The Stormont Gas Company	Water	325	5	24	24	483	450	459·1	0
Quebec	Quebec Gas Company	C.W.	9,246	2	144	144	495	450	463·6	0
St. John	New Brunswick Power Co., St. John	Coal	1,754	4	48	48	635	547	572·5	0
	Citizens Gas Company, St. Stephen	Coal	155	.....	.....	.....	.....	.....	.....	
Sudbury	Great Northern Gas Co., Ltd., Sault Ste. Marie	.....	968	.....	.....	.....	.....	.....	.....	
Toronto	Consumers' Gas Company, Toronto	C. & C.W.	154,220	1	300	300	522	480	499·4	0
	Corporation of Guelph	C. & C.W.	4,385	3	96	96	550	479	518·6	0
	Corporation of Owen Sound	C.W.	1,328	4	48	48	535	454	490·2	0
	Barrie Gas Company	C.W.	330	5	24	24	508	463	488·6	0
Vancouver	Vancouver Gas Company, Vancouver	C. & C.W.	34,933	1	300	300	496	438	460·4	17
	Vancouver Gas Company (New Westminster)	C. & C.W.	.....	5	324	24	469	445	455·9	5
Victoria	Victoria Gas Company	Coal	4,275	3	96	96	479	444	457·5	1
Winnipeg	Winnipeg Electric Company, Ltd	Coal	19,369	1	300	292	592	478	522·6	0
	Can. Gas and Electric Corporation (Brandon)	Coal	1,221	4	48	47	511	450	474·8	
	Totals	.....	482,076	.....	3,516	3,507	.....	.....	498·0	24

APPENDIX D

STATEMENT of Electric Meters tested during the Fiscal Year 1927-28

District	Correct	Accepted		Rejected		New	Re-tests	Dis-putes	Totals	Class I 60c.	Class II 75c.	Class III $1.50	Class IV $5.00
		Not over 3% fast	Not over 3% slow	Over 3% fast	Over 3% slow								
Belleville	3,759	4,076	1,392	4	1	2,534	6,675	23	9,232	6,866	2,295	71	.....
Calgary	1,777	5,497	515	43	27	2,565	5,249	45	7,859	6,889	932	8	30
Charlottetown	217	329	231	10	.....	275	491	21	787	718	65	4	.....
Edmonton	1,163	3,626	331	5	80	1,470	3,729	6	5,205	4,815	389	1	.....
Fort William	374	2,536	818	.....	.....	859	2,869	.....	3,728	2,451	1,245	32	.....
Halifax	4,699	2,323	449	2	5	2,219	5,240	19	7,478	6,916	549	13	.....
Hamilton	11,717	6,284	2,504	3	7	6,074	14,392	49	20,515	12,481	7,733	301	.....
London	6,005	11,077	5,779	48	136	7,650	15,353	42	23,045	11,351	11,414	280	.....
Montreal	4,678	39,126	16,115	246	280	19,485	40,829	131	60,445	57,601	1,720	1,098	26
Nelson	1,735	1,304	87	2	1	1,134	1,984	11	3,129	2,528	570	31	.....
Ottawa	1,990	10,017	2,318	188	161	5,204	9,100	370	14,674	10,128	4,303	243	.....
Quebec	3,714	6,302	2,296	5	2	7,044	5,242	33	12,319	11,606	540	164	9
Regina	4,603	6,254	1,483	1	1	4,528	7,803	11	12,342	10,748	1,573	21	.....
St. John	980	3,212	798	.....	1	1,776	3,192	23	4,991	4,632	352	7	.....
Sudbury	1,145	3,436	464	.....	8	3,107	1,946	.....	5,053	4,164	879	10	.....
Three Rivers	195	4,366	1,130	.....	.....	2,188	3,500	3	5,691	4,943	658	90	.....
Toronto	14,351	24,556	7,715	123	192	13,760	33,122	55	46,937	30,434	15,263	1,240	.....
Vancouver	5,986	13,634	1,715	72	102	5,962	15,522	25	21,509	17,958	3,487	64	.....
Victoria	857	3,266	416	1	.....	1,126	3,398	16	4,540	4,134	392	14	.....
Winnipeg	3,497	19,991	355	2	1	6,536	17,300	10	23,846	16,134	7,339	373	.....
Totals	73,442	171,212	47,911	755	1,005	95,496	196,936	893	293,325	227,497	61,698	4,065	65

APPENDIX E

STATEMENT of Gas Meters tested during the Fiscal Year 1927-28

District	Correct	Accepted		Rejected		New	Re-tests	Dis-putes	Totals	Class I 60c.	Class II $1.00	Class III $2.00	Class IV $2.50
		Not over 2% fast	Not over 3% slow	Over 2% fast	Over 3% slow								
Belleville	883	195	998	19	68	352	1,806	5	2,163	2,129	28	5	1
Calgary	733	631	3,946	15	4	1,915	3,380	34	5,329	4,670	470	111	78
Edmonton	148	7	859	3	.....	977	32	8	1,017	931	59	24	3
Halifax	356	.....	274	.....	.....	185	445	.....	630	606	18	.....	6
Hamilton	3,891	1,305	6,879	2	6	2,373	9,689	21	12,083	11,529	484	12	58
London	2,630	2,813	6,052	9	6	2,851	8,645	14	11,510	10,906	517	39	48
Montreal	3,035	7,495	20,333	130	167	13,462	17,580	118	31,160	30,711	380	68	1
Nelson	28	9	46	.....	.....	48	35	.....	83	83	.....	.....	.....
Ottawa	732	1,808	1,071	18	16	486	3,124	35	3,645	3,530	69	27	19
Quebec	659	504	667	31	16	665	1,198	14	1,877	1,841	36	.....	.....
St. John	598	227	714	1	.....	299	1,240	1	1,540	958	575	7	.....
Sudbury	33	204	16	.....	.....	253	.....	.....	253	245	5	3	.....
Toronto	9,569	4,976	22,802	49	50	13,223	24,093	130	37,446	36,298	909	186	53
Vancouver	892	2,689	4,268	40	43	4,129	3,750	53	7,932	7,547	356	7	22
Victoria	218	431	266	2	.....	194	718	5	917	780	134	3	.....
Winnipeg	2,635	681	1,780	1	2	216	4,879	4	5,099	5,022	66	.....	11
Totals	27,040	23,975	70,971	320	378	41,628	80,614	442	122,684	117,786	4,106	492	300

APPENDIX F

STATEMENT of Natural Gas Companies Registered

District	Name of Company	Location	Number of Meters
Calgary	Canadian Western Natural Gas Light, Heat and Power Co., Ltd	Calgary, Alta	13,968
	" " " "	Lethbridge	1,666
	" " " "	Macleod	315
	" " " "	Claresholm	289
	" " " "	Granum	107
	" " " "	Nanton	210
	" " " "	Okotoks	151
	" " " "	Brooks	148
	" " " "	Main Line	35
	" " " "	Field	1
	" " " "	Bowness	11
	" " " "	Turner Valley Line 10′	4
	" " " "	Stavely	76
	" " " "	Parkland	23
	" " " "	High River	237
	The town of Bow Island	Bow Island	90
	United Natural Gas Development Co.	Foremost	–
	City of Medicine Hat	Medicine Hat	2,675
	Canada Western Power and Fuel Co., Ltd	Redcliff	257
	Wm. Higgins	Suffield	–
	Royalite Oil Company Limited	Turner Valley	6
Edmonton	Northwestern Utilities, Limited	Bruce, Alta	37
	" " "	Edmonton	7,623
	" " "	Holden	76
	" " "	Ryley	84
	" " "	Shonts	2
	" " "	Tofield	138
	" " "	Viking	172
	Wainwright Gas Company, Limited	Wainwright	269
Hamilton	Brantford Gas Company	Brantford, Ont	
	Provincial Natural Gas and Fuel Co. of Ontario, Ltd	Bridgeburg	3,358
	Chippawa Development Co., Ltd	Chippawa	1,146
	Chippawa Oil and Gas Co., Ltd	Lincoln County	25
	Dominion Natural Gas Co., Ltd	Cayuga	201
	Industrial Natural Gas Co., Ltd	Bertie, Crowland & Humberston	204
	Port Colborne-Welland Natural Gas and Oil Co	Caledonia	88
	Dominion Natural Gas Co., Ltd	Delhi	632
	" " "	Dundas	261
	" " "	Blackheath	1,096
	" " "	Dunnville	189
	" " "	Echo Place	1,297
	Lake Shore Natural Gas Co., Ltd	Fort Erie	182
	Fonthill and Ridgeville Gas Co., Ltd.	Fonthill	325
	Dominion Natural Gas Co., Ltd	Galt	180
	" " "	Hamilton	1,055
	" " "	Hagersville	2,328
	Midfield Natural Gas Co., Ltd	Twp. of North Cayuga and Oneida	399
	Dominion Natural Gas Co., Ltd	Jarvis	33
	" " "	Lynedoch	237
	Cliff Gas Co., Ltd	Moulton	45
	Provincial Natural Gas and Fuel Co., Ltd	Niagara Falls	38
	Dominion Natural Gas Co., Ltd	Paris	2,761
	" " "	Port Dover	512
	" " "	Port Rowan	542
	Stirling Gas Co., Ltd	Port Colborne	254
	Dominion Natural Gas Co., Ltd	Selkirk	1,740
	" " "	Simcoe	563
	" " "	St. George	1,772
	" " "	St. Williams	101
Hamilton	Provincial Natural Gas and Fuel Co. of Ont., Ltd	Sherkston, Ont	103
	United Gas Companies, Limited	St. Catharines	1,913
	Dominion Natural Gas Co., Ltd	Vittoria	5,386
	Provincial Natural Gas and Fuel Co. of Ont., Ltd	Welland	80
	J. A. Coleman	Wainfleet and Gainsboro	2,288
			45

APPENDIX F—Concluded

STATEMENT of Natural Gas Companies Registered

District	Name of Company	Location	Number of Meters
London	The Central Pipe Line Co., Ltd. of Chatham	Aylmer, Ont	684
	" " "	Malahide and Bayham	75
	" " "	Vienna	71
	" " "	Port Burwell	85
	Dominion Natural Gas Company, Limited	Ingersoll	906
	" " "	Woodstock	1,552
	" " "	Tillsonburg	1,445
	Oil Springs Oil and Gas Co., Ltd	Oil Springs	138
	Ontario Salt Company, Ltd	Belmont	65
	Town of Leamington	Leamington	1,437
	Southern Ontario Gas Co., Ltd	Aldboro	26
	" " "	Dorchester and Wallacetown	164
	" " "	Dunwich Twp	59
	" " "	Dutton	256
	" " "	Highgate	116
	" " "	Kingsville (Glenwood Div.)	254
	" " "	Kingsville (Beaver Div.)	1,046
	" " "	Lambeth	90
	" " "	Leamington Twp	635
	" " "	Oxford Twp	56
	" " "	Raleigh and Howard Twp	13
	" " "	Rodney	250
	" " "	Shedden and Fingal	137
	" " "	Southwold Twp	108
	" " "	Westminster Twp	128
	" " "	West Lorne	223
	" " "	Wheatley and Wheatley Co	246
	The Union Natural Gas Co. of Canada, Ltd	Blenheim	540
	" " " "	Chatham	3,930
	" " " "	Dresden	491
	" " " "	Essex	469
	" " " "	Petrolia	764
	" " " "	Ridgetown	639
	" " " "	Tilbury	415
	" " " "	Sarnia	4,442
	" " " "	Wallaceburg	1,156
	" " " "	Ford City	850
	" " " "	Riverside	88
	" " " "	Sandwich	584
	" " " "	Walkerville	1,086
	" " " "	Windsor	8,255
St. John	Moncton Tramways Electricity and Gas Co., Ltd	Moncton, N.B	4,892
	Total number of meters		98,915

APPENDIX G

ACETYLENE Gas Companies Registered

District	Company	Location	Number of Meters
Ottawa	Peoples' Gas Supply Company, Ltd	Ottawa, Ont	
Winnipeg	Town of Birtle	Birtle, Man	32
	Deloraine Gas Company	Deloraine, Man	78
	Shawinigan Chemicals, Ltd	Hamiota, Man	55
	Manitou Gas Company	Manitou, Man	69
	Morris Gas Company	Morris, Man	66
	Souris Consumers Gas Co., Ltd	Souris, Man	57
	Total number of meters		357

APPENDIX H

STATEMENT showing amount of Electrical Energy, Gas, or Fluid generated or produced for export and for consumption in Canada, under the authority of the Electricity and Fluid Exportation Act, for the year ending 31st day of March, 1928

Name of Contractor and place of business	Month	Units produced for export		Units produced for use in Canada		Total output of generating Station or other Source	
		K.W. hours	H.P. years	K.W. hours	H.P. years	K.W. hours	H.P. years
Hydro-Electric Power Commission of Ontario, Toronto, Ont.	April	31,856,600	4,875	206,578,300	31,611	238,434,900	36,486
	May	31,718,700	4,85[illegible]	212,948,100	32,586	244,666,800	37,440
	June	31,682,000	4,848	205,247,000	31,407	236,929,000	36,255
	July	31,919,300	4,884	202,425,700	30,976	234,345,000	35,860
	August	32,754,600	5,012	214,496,100	32,823	247,250,700	37,835
	September	31,989,200	4,895	218,588,700	33,449	250,577,900	38,344
	October	33,248,100	5,088	235,578,300	36,049	268,826,400	41,137
	November	32,159,200	4,921	238,128,700	36,439	270,287,900	41,360
	December	33,060,700	5,061	248,956,900	38,096	282,017,600	43,157
	January	33,111,100	5,067	247,247,200	37,834	280,358,300	42,901
	February	31,277,300	4,786	233,752,300	35,769	265,029,600	40,555
	March	33,254,400	5,087	243,791,800	37,305	277,046,200	42,392
	Totals	388,031,200	59,378	2,707,739,100	414,344	3,095,770,300	473,722
Hydro-Electric Power Commission of Ontario, Toronto, Ont. (surplus)	April	34,609,800	5,296	.....	.....	34,609,800	5,296
	May	27,668,300	4,234	.....	.....	27,668,300	4,234
	June	41,559,000	6,359	.....	.....	41,559,000	6,359
	July	31,573,900	4,832	.....	.....	31,573,900	4,832
	August	42,547,500	6,511	.....	.....	42,547,500	6,511
	September	44,817,400	6,858	.....	.....	44,817,400	6,858
	October	41,447,700	6,342	.....	.....	41,447,700	6,342
	November	32,707,700	5,005	.....	.....	32,707,700	5,005
	December	29,465,400	4,509	.....	.....	29,465,400	4,509
	January	31,556,800	4,829	.....	.....	31,556,800	4,829
	February	32,306,700	4,944	.....	.....	32,306,700	4,944
	March	37,032,800	5,667	.....	.....	37,032,800	5,667
	Totals	427,293,000	65,386	.....	.....	427,293,000	65,386
Cedars Rapids Mfg. and Power Co. Ltd., Montreal, Quebec.	April	33,080,399	5,062	29,287,000	4,482	62,367,399	9,544
	May	33,593,872	5,141	29,376,000	4,495	62,969,872	9,636
	June	33,909,747	5,189	28,376,000	4,342	62,285,747	9,531
	July	41,820,183	6,399	28,271,000	4,326	70,091,183	10,725
	August	48,223,940	7,379	29,782,000	4,557	78,005,940	11,936
	September	43,537,490	6,662	32,363,000	4,952	75,900,490	11,614
	October	33,332,829	5,101	40,995,171	6,273	74,328,000	11,374
	November	30,477,381	4,664	43,235,419	6,616	73,712,800	11,280
	December	32,103,368	4,913	44,439,032	6,800	76,542,400	11,713
	January	24,428,941	3,738	44,214,059	6,766	68,643,000	10,504
	February	26,119,616	3,997	44,368,984	6,789	70,488,600	10,786
	March	31,136,306	4,76[illegible]	41,123,000	6,293	72,259,306	11,057
	Totals	411,764,072	63,009	435,830,665	66,691	847,594,737	129,700
Canadian Niagara Power Co., Ltd., Niagara Falls, Ont.	April	33,051,896	5,058	19,671,272	3,010	52,723,168	8,068
	May	34,531,548	5,284	16,145,340	2,471	50,676,888	7,755
	June	34,793,188	5,324	16,166,252	2,474	50,959,440	7,798
	July	34,760,132	5,319	16,233,868	2,484	50,994,000	7,803
	August	36,309,324	5,556	16,451,532	2,517	52,760,856	8,073
	Sept	32,597,304	4,988	16,339,032	2,500	48,936,336	7,488
	October	36,559,046	5,594	17,793,236	2,723	54,352,282	8,317
	November	35,066,776	5,366	17,022,944	2,605	52,089,720	7,971
	December	36,896,008	5,646	16,626,272	2,544	53,522,280	8,190
	January	34,943,616	5,347	17,209,464	2,633	52,153,080	7,980
	February	34,029,088	5,207	15,633,464	2,392	49,662,552	7,599
	March	35,391,896	5,416	16,607,272	2,541	51,999,168	7,957
	Totals	418,929,822	64,105	201,899,948	30,894	620,829,770	94,999
Canadian Niagara Power Co. Ltd., Niagara Falls, Ont. (surplus).	April	1,100	0·17	.....	.....	1,100	0·17
	May	1,100	0·17	.....	.....	1,100	0·17
	June	21,900	3·35	.....	.....	21,900	3·35
	July	118,800	18·20	.....	.....	118,800	18·20
	August	3,000	0·46	.....	.....	3,000	0·46
	September	700	0·11	.....	.....	700	0·11
	October	.....	.....	.....	.....	.....	.....
	November	400	0·06	.....	.....	400	0·06
	December	54,200	8·30	.....	.....	54,200	8·30
	January	.....	.....	.....	.....	.....	.....
	February	.....	.....	.....	.....	.....	.....
	March	3,500	0·54	.....	.....	3,500	0·54
	Totals	204,700	31·36	.....	.....	204,700	31·36

APPENDIX H—Continued

STATEMENT showing amount of Electrical Energy, Gas, or Fluid generated or produced for export and for consumption in Canada, under the authority of the Electricity and Fluid Exportation Act, for the year ending 31st day of March, 1928

Name of Contractor and place of business	Month	Units produced for export		Units produced for use in Canada		Total output of generating Station or other Source	
		K.W. hours	H.P. years	K.W. hours	H.P. years	K.W. hours	H.P. years
Western Power Company of Canada, Ltd., Vancouver, B.C.	April	300	0·04	17,091,100	2,615	17,091,400	2,615
	May	250,400	38·35	14,867,700	2,275	15,118,100	2,313
	June	215,888	33·05	13,166,012	2,015	13,381,900	2,048
	July	120,615	18·47	14,188,885	2,171	14,309,500	2,189
	August	146,800	22·50	16,511,900	2,527	16,658,700	2,549
	September	.....	.....	.....	.....	.....	.....
	October	10,300	1·58	19,088,500	2,921	19,098,800	2,922
	November	1,047	0·16	20,363,053	3,116	20,364,100	3,116
	December	1,618	0·25	22,920,082	3,507	22,921,700	3,507
	January	.....	.....	17,853,900	2,732	17,853,900	2,732
	February	5,481	0·84	18,922,819	2,896	18,928,300	2,896
	March	.....	.....	26,051,700	3,986	26,051,700	3,986
	Totals	752,449	115·24	201,025,651	30,761	201,778,100	30,876
Ontario and Minnesota Power Co., Ltd., Fort Frances, Ont.	April	255,600	39	1,757,435	269	2,013,035	308
	May	237,300	36	1,632,433	250	1,869,733	286
	June	723,000	111	450,143	69	1,173,143	180
	July	1,222,900	187	199,135	30	1,422,035	217
	August	1,634,100	250	337,740	52	1,971,840	302
	September	1,558,000	238	588,032	90	2,146,032	328
	October	1,534,200	235	437,952	67	1,972,152	302
	November	1,723,700	264	424,426	65	2,148,126	329
	December	1,723,900	264	454,900	70	2,178,800	334
	January	1,773,700	271	441,048	67	2,214,748	338
	February	1,564,200	239	394,654	60	1,958,854	299
	March	1,593,500	244	393,664	60	1,987,164	304
	Totals	15,544,100	2,378	7,511,562	1,149	23,055,663	3,527
Maine and New Brunswick Electrical Power Company, Presque Isle, Maine, U.S.A.	April	816,248	125	260,462	40	1,076,710	165
	May	723,221	111	198,079	30	921,300	141
	June	617,810	94	216,790	33	834,600	127
	July	664,067	102	239,133	37	903,200	139
	August	621,655	95	269,345	41	891,000	136
	September	720,950	110	323,350	49	1,044,300	159
	October	893,032	137	312,768	48	1,205,800	185
	November	752,232	115	332,668	51	1,084,900	166
	December	883,065	135	283,335	43	1,166,400	178
	January	815,449	125	248,851	38	1,064,300	163
	February	736,401	113	222,599	34	959,000	147
	March	781,702	119	231,298	35	1,013,000	154
	Totals	9,025,832	1,381	3,138,678	479	12,164,510	1,860
British Columbia Electric Railway Co., Ltd., Vancouver, B.C.	April	74,038	11·3	9,545,562	1,461	9,619,600	1,472
	May	68,407	10·5	11,136,193	1,704	11,204,600	1,715
	June	55,039	8·4	12,007,861	1,837	12,062,900	1,845
	July	59,660	9·1	10,654,640	1,630	10,714,300	1,639
	August	61,766	9·5	12,020,034	1,839	12,081,800	1,849
	September	73,325	11·2	11,369,675	1,740	11,443,000	1,751
	October	80,720	12·3	11,475,580	1,756	11,556,300	1,768
	November	82,882	12·7	11,884,418	1,819	11,967,300	1,832
	December	90,508	13·8	13,206,092	2,021	13,296,600	2,035
	January	90,123	13·8	17,211,477	2,634	17,301,600	2,648
	February	79,483	12·2	13,528,017	2,070	13,607,500	2,082
	March	85,043	13·0	7,083,157	1,084	7,168,200	1,097
	Totals	900,994	137·8	141,122,706	21,596	142,023,700	21,733
West Kootenay Power and Light Co., Rossland, B.C.	April	48,200	7·6	34,530,300	5,284	34,578,500	5,292
	May	38,800	6·0	35,790,300	5,477	35 29,100	5,483
	June	32,100	4·9	36,985,800	5,660	37,017,900	5,665
	July	33,900	5·2	39,949,200	6,113	39,983,100	6,118
	August	40,200	6·2	43,579,900	6,667	43,620,100	6,673
	September	42,400	6·5	41,452,400	6,343	41,494,800	6,350
	October	45,700	7·0	45,049,400	6,894	45,095,100	6,901
	November	51,300	7·8	44,334,800	6,784	44,386,100	6,792
	December	59,900	9·2	45,386,800	6,945	45,446,700	6,954
	January	61,300	9·4	46,318,300	7,088	46,379,600	7,097
	February	52,500	8·0	43,714,100	6,689	43,766,600	6,697
	March	52,700	8·1	46,313,200	7,087	46,365,900	7,095
	Totals	559,000	85·9	503,404,500	77,031	503,963,500	77,117

APPENDIX H—Concluded

STATEMENT showing amount of Electrical Energy, Gas, or Fluid generated or produced for export and for consumption in Canada, under the authority of the Electricity and Fluid Exportation Act, for the year ending 31st day of March, 1928

Name of Contractor and place of business	Month	Units produced for export		Units produced for use in Canada		Total output of generating Station or other Source	
		K.W. hours	H.P. years	K.W. hours	H.P. years	K.W. hours	H.P. years
Maritime Electric Co., Ltd., St. Stephen, N.B.	April	44,098	6·7	106,070	16·2	150,168	22·9
	May	38,301	5·9	98,937	15·0	137,238	20·9
	June	35,863	5·5	83,589	12·8	119,452	18·3
	July	35,102	5·4	89,117	13·6	124,219	19·0
	August	40,990	6·3	100,604	15·4	141,594	21·7
	September	44,668	6·8	107,109	16·4	151,777	23·2
	October	54,256	8·3	106,152	16·1	160,408	24·4
	November	58,228	8·9	139,758	21·4	197,986	30·3
	December	46,772	7·2	138,925	21·3	185,697	28·5
	January	85,059	13·0	119,296	18·3	204,355	31·3
	February	60,597	9·3	113,365	17·3	173,962	26·6
	March	54,048	8·3	127,234	19·5	181,282	27·8
	Totals	597,982	91·6	1,330,156	203·3	1,928,138	294·9
Sherbrooke Railway and Power Co., Montreal, P.Q.	April	20,940	3·2	774,660	119	795,600	122
	May	21,820	3·3	619,580	95	641,400	98
	June	20,490	3·1	714,910	109	735,400	112
	July	21,911	3·4	1,190,800	182	1,212,711	185
	August	24,242	3·7	1,109,358	170	1,133,600	174
	September	23,160	3·6	1,051,440	161	1,074,600	165
	October	24,397	3·7	1,003,603	154	1,028,000	158
	November	23,010	3·5	1,113,790	170	1,136,800	173
	December	122,534	18·7	1,239,466	190	1,362,000	209
	January	138,938	21·3	997,862	153	1,136,800	174
	February	137,532	21·0	607,668	93	745,200	114
	March	168,483	25·	438,317	67	606,800	93
	Totals	747,457	114·3	10,861,454	1,663	11,608,911	1,777
International Electric Co., Ltd., Stewart, B.C.	April	6,625	1·0	13,711	2·1	20,336	3·1
	May	6,424	1·0	12,921	2·0	19,345	3·0
	June	6,477	1·0	12,451	1·9	18,928	2·9
	July	6,535	1·0	5,708	0·9	12,243	1·9
	August	6,543	1·0	5,808	0·9	12,351	1·9
	September	6,749	1·0	6,004	0·9	12,753	1·9
	October	7,042	1·1	7,171	1·1	14,213	2·2
	November	7,001	1·1	7,001	1·1	14,002	2·2
	December	8,653	1·3	9,116	1·4	17,769	2·7
	January	9,053	1·4	10,820	1·6	19,873	3·0
	February	9,687	1·5	12,717	1·9	22,404	3·4
	March	17,010	2·6	18,323	2·8	35,333	5·4
	Totals	97,799	15·0	121,751	18·6	219,550	33·6
Fraser Companies Limited, Edmundston, N.B.	April	22,000	3·4	1,587,400	243	1,609,400	246
	May	13,000	2·0	1,605,800	246	1,618,800	248
	June	17,000	2·6	1,641,400	251	1,658,400	254
	July	41,000	6·3	1,669,700	255	1,710,700	261
	August	26,000	4·0	1,822,200	279	1,848,200	283
	September	21,000	3·2	1,634,300	250	1,655,300	253
	October	35,000	5·5	1,902,000	291	1,937,000	297
	November	24,000	3·7	2,253,900	345	2,277,900	349
	December	29,000	4·5	1,655,900	253	1,684,900	258
	January	32,000	4·9	2,067,400	316	2,099,400	321
	February	55,000	8·4	1,697,400	260	1,752,400	268
	March	92,600	14·2	1,630,900	250	1,723,500	264
	Totals	407,600	62·5	21,168,300	3,239	21,575,900	3,302

SUMMARY

Hydro-Electric Power Commission of Ontario	388,031,200	59,378	2,707,739,100	414,344	3,095,770,300	473,722
Hydro-Electric Power Commission of Ontario, (surplus)	427,293,000	65,386	.....	.....	427,293,000	65,386
Cedars Rapids Manufacturing and Power Co., Ltd	411,764,072	63,009	435,830,665	66,691	847,594,737	129,700
Canadian Niagara Power Co., Ltd	418,929,822	64,105	201,899,948	30,894	620,829,770	94,999
Canadian Niagara Power Co., Ltd. (surplus)	204,700	31	.....	.....	204,700	31
Western Power Co. of Canada Ltd	752,449	115	201,025,651	30,761	201,778,100	30,876
Ontario and Minnesota Power Co., Ltd.	15,544,100	2,378	7,511,562	1,149	23,055,662	3,527
Maine and New Brunswick Electric Power Co	9,025,832	1,381	3,138,678	479	12,164,510	1,860
British Columbia Electric Railway Co., Ltd	900,994	138	141,122,706	21,595	142,023,700	21,733
West Kootenay Power and Light Co	559,000	86	503,404,500	77,031	503,963,500	77,117
Maritime Electric Co., Ltd	597,982	92	1,330,156	203	1,928,138	295
Sherbrooke Railway and Power Co	747,457	114	10,861,454	1,663	11,608,911	1,777
International Electric Co., Ltd	97,799	15	121,751	19	219,550	34
Fraser Companies Limited	407,600	63	21,168,300	3,239	21,575,900	3,302
Totals	1,674,856,007	256,291	4,235,154,471	648,068	5,910,010,478	904,359

APPENDIX I

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Charlottetown—									
R. H. Gordon	Alberton	Water	1-3	60	2,200	220	110		110
Chas. Murray Electric Light Co.	Bradalbane	Water	D.C.		110		110		15
Cardigan Electric Company, Ltd	Cardigan	Purchased	2	60	2,200	110	110	2	35
Maritime Electric Company, Ltd	Charlottetown	Steam	1-3	60	2,200	220	110	178	2,518
Geo. E. Leard & Son	Crapand	Water	1-2	60	2,200	110	110		40
Dunk River Hydro Electric Co.	Emerald, R.R. No. 2.		1-3	60	2,200	220	110	3	129
The Hunter River Electric Lt. Co., Ltd.	Hunter River	Water	1-3	60	2,200		110		33
Kinkora Electric Light Co.	Kinkora	Purchased	1	60	2,200	110	110		21
Montague Electric Co., Ltd	Montague	Water	1-3	60	2,300	110/220	110	55	250
Leard's Hydro Electric Plant	Mt. Stewart	Water	2-3	60	2,300		110		18
Charles W. Ives	North Tryon	Water and steam	1-3	60	2,200	110	110		75
The Town of Souris	Souris	Oil	3	60	2,200		110		115
Town of Summerside Light Dept.	Summerside		1-3	60	2,200	220	110	23	630
Total Number of meters in District of Charlottetown								261	3,989
Halifax—									
Canada Electric Compay Ltd	Amherst	Steam	1-3	60	2,200	2,200/220	110	58	1,560
Town of Annapolis Royal	Annapolis Royal	Water	3	60	2,300		110	2	50
Town of Antigonish Electric Dept.	Antigonish	Oil	1-3	60	2,300	110/220	110		306
Elec. Lt. Com. of Town of Aylesford	Aylesford	Purchased	1	60	2,200	110	110	1	76
The Morristown Elec. Lt. & Pr. Co., Ltd.	Aylesford	Water	3	60	2,200		110		25
A. Bethune	Baddeck	Oil	D.C.		110/114		110/114		28
Barrington Elec. Co., Ltd	Barrington	Water	1-3	60	2,300		110		67
Barr's Corner Elec. Light Co., Ltd	Barr's Corner	Purchased	2	60		2,200	110		22
Bear River and Digby Elec. Lt., Heat and Power Co., Ltd	Bear River	Water	3	60	2,300	2,300	110		1
The Sackville River Elec. Co., Ltd	Bedford	Purchased	1-3	60		220/550/2,300	110		326
Town of Berwick	Berwick	Water	1-3	60	2,300	220/110	110	6	200
Somerset Elec. Lt. and Power Co., Ltd	Berwick	Purchased		60			110		45
Bridgetown Elec. Lt., Ht. & Pr. Co. (formerly Paradise West Elec. Co.)	Bridgetown		1	60	2,300	110/220	110	1	30

Bridgetown Elec. Lt., Heat & Pr. Co.	Bridgetown		1-3	60	2,300	110/220	110	8	298
The Town of Bridgewater	Bridgewater	Water	3	60	2,200	110/550	110	13	711
Water Com. for town of Canning	Canning	Purchased	1-3	60	2,300	220	110	9	168
The Town of Canso	Canso	Oil	3	60	2,200	220	110	1	339
Chester Light & Power Co., Ltd	Chester	Water	1-3	60	2,200	220	110	2	114
Elec. Light Com. of Upper Church St.	Chipman's Corners	Purchased	1	60			110		23
Dartmouth Gas, Elec. Lt., Ht. & Pr. Co.	Dartmouth	Purchased	1-3	60		220/550	110	46	1,896
The Town of Digby Light & Power Co.	Digby	Purchased	1-3	60		220	110	8	306
The Digby County Power Board	Digby	Water	1-3	60	2,300	220	110	2	155
The Town of Dominion	Dominion	Purchased	1	25			110		400
The Gaspereau Valley Elec. Lt. Co., Ltd.	Gaspereau	Purchased	2-3	60	2,300	110	110	3	42
Dominion Coal Company	Glace Bay	Steam	1-3	25	2,200/6,600	550/2,200/6,600	110/220	71	56
Town of Glace Bay	Glace Bay	Purchased	1-2	60	2,200	110/220	110	13	2,182
Grafton Elec. Light and Power Co.	Grafton	Purchased	3	60			110		73
Nova Scotia Tramways & Pr. Co., Ltd	Halifax	Steam	1-3	60	2,300	220/550/2,300	110	704	10,702
The Nova Scotia Power Com., St. Margaret's Bay	Halifax	Water	3	60	13,200	13,200	110	3	4
The Nova Scotia Power Com., Mushamush System	Halifax	Water	3	60	6,600	6,600/3,300	110	4	98
The Nova Scotia Power Com., Sheet Harbour System	Halifax	Water	3	60	6,600/2,300	13,200/6,600/2,300	110	2	70
The Town of Hantsport	Hantsport	Purchased	1-3	60		220	110	4	169
Inverness Railway and Coal Co.	Inverness		D.C.		125		115/125		1
Kentville Electric Commission	Kentville	Purchased	1-3	60	2,200	550/220/110	220/110		700
Elec. Lt. Commissioners of Kingston	Kingston	Purchased	1-3	60	4,000	220	110/220	1	94
Kingsport Elec. Light Company, Ltd.	Kingsport	Purchased	3	60		2,200	110		26
Brigetown Light, Heat and Power Co.	Lawrencetown		1-3	60	2,300	110/220	110		123
The Town of Liverpool	Liverpool	Water	2-3	60	2,400	220/550	110	2	
The Town of Lockeport	Lockeport		1-3	60	2,300		110		96
Lower Horton Electric Co., Ltd	Lower Horton	Purchased	1-3	60	2,200	110/220	110	6	45
Corporation of Louisburg	Louisburg	Purchased	D.C.				220		101
Lunenburg Gas Co., Ltd	Lunenburg	Water	1-3	60	6,600	550/220	110/220	33	665
The Town of Mahone Bay	Mahone Bay	Purchased	1	60			110		207
The Town of Middleton	Middleton	Water	2-3	60	2,300	220/550	110	14	324
Milton Hydro Electric Co., Ltd	Milton	Water	3	60	2,300		110		
The Town of Mulgrave	Mulgrave	Water	2-3	60	2,300		110		120
The Zwicker Elec. Lt. & Power Co., Ltd.	New Germany	Water	3	60	2,200	110	110		
Pictou County Power Board	New Glasgow	Steam	1-3	60	2,300/600	110/220	110	134	3,304
The Brooklyn Light & Power Co., Ltd.	Newport	Purchased	1-2	60		220	110	2	122
Dominion Utilities Co., Ltd	New Waterford	Purchased	1	25		2,200	110		1,325
Oxford Electric Light & Power Co., Ltd.	Oxford	Water and steam	1-3	60	2,300	220	110		204
The Electric Light System	Parrsboro	Oil	2	60	2,200	104	104	1	263
The Town of Port Hawkesbury	Port Hawkesbury		3	60	2,300		110		75
The Town of Pictou	Pictou	Purchased	1-3	60	2,300	220/550/2,300	110	8	560

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electric'ty Inspection Act, during the Fiscal year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Halifax—Continued									
Canard Elec. Light and Power Co., Ltd.	Port William	Purchased	1-2	60	.....	110/220	110	5	70
Riverport Electric Light Commission	Riverport	Water	3	60	6,600	220	110	5	227
Corporation of Town of Shelburne	Shelburne	Water	3	60	2,300	220	110	.....	.....
Sheffield Mills Light & Power Co., Ltd.	Sheffield Mills	Purchased	1-3	60	2,300	.....	110	1	32
South Berwick Elec. Light Co., Ltd.	South Berwick	Purchased	3	60	2,200	.....	110	.....	32
Edison Electric Light & Power Co., Ltd.	Springhill	Purchased	2	60	.....	550	110	1	1,003
Acadia Coal Co., Ltd.	Stellarton	Steam	1-3	50	3,150	3,150/550	110	2	1
The Avon River Power Co., Ltd.	Stewiacke	Steam	1-3	60	2,300	.....	110	.....	169
Sydney Mines Electric Co., Ltd.	Sydney Mines	Steam	1-2	60	2,200	110/220	110/220	.....	.....
Cape Breton Electric Co., Ltd.	Sydney	Steam	1-2	60	2,200	110/220	110/220	196	6,549
The Truro Electric Light Commission	Truro	Steam	3	60	2,300	220	110	65	1,362
Waterville and Cambridge Electric Light Power Company Ltd.	Waterville	Water	3	60	75	220	110	.....	102
Village of Weymouth	Weymouth	Purchased	1-3	60	2,300	110	110	3	85
The Avon River Power Co., Ltd.	Windsor	Water	1-3	60	2,300	220/440	110	86	709
The Wolfville Electric Commission	Wolfville	Purchased	1-3	60	.....	220/110	110	75	450
Yarmouth Light and Power Co., Ltd.	Yarmouth	.....	1-3	60	2,200	220	110	62	1,201
Total number of meters in District of Halifax	.....	.....	.....	.....	.....	.....	.....	1,663	40,890
St. John—									
Andover & Perth Electric Light Com.	Andover	Purchased	1-3	60	11,000	220/110	110	24	210
M. & N. B. Electrical Power Co.	Aroostook Junc.	Water	1-3	60	1,100	110/220/550	110	3	87
Bathurst Electric and Water Power Co., Ltd.	Bathurst	Purchased	2-3	60	.....	220	110	59	753
Bath, Bristol and Florenceville Hydro-Electric Dist.	Bristol	Purchased	2-3	60	2,200	2,200	110	4	285
The Town of Campbellton	Campbellton	Purchased	1-3	60	.....	2200/550/220	110	45	1,170
C. M. Sherwood, Ltd.	Centreville	Purchased	1-3	60	33,000/2,200	220	110	1	110
Light Department, Town of Chatham	Chatham	Oil	1-2-3	60	2,300	224/112	112	24	620
King Lumber Company, Ltd.	Chipman	Steam	.....	.....	125	110	110	.....	24
Town of Dalhousie	Dalhousie	Gas	1-3	60	2,300	220	110	2	254
The Dorchester Penitentiary	Dorchester	Steam	1-3	60	2,300/110	550	110	.....	33
The Dorchester Development Co., Ltd.	Dorchester	Purchased	1	60	2,200	110	110	1	103

The Corporation of Edmundston	Edmundston	Water	1-3	60	2,300	110/220/550	110	34	816
Fraser Companies, Limited	Edmundston	Water	1-3	60	6,600/600	550/2,300	110/220	16	1
Fort Kent Electric Company	Fort Kent	Purchased	1	60		110/220	110	18	92
The Maritime Electric Co., Ltd	Fredericton	Steam	1-2	60	2,200	220	110	59	2,283
The Town of Grand Falls	Grand Falls	Purchased	1-3	60	2,200	550/220/110	110	10	290
Hartland Electric Co., Ltd	Hartland	Purchased	1-3	60	33,000	220	110	11	224
Lakeville Electric Light and Power Co.	Lakeville	Purchased	1	60	2,300	110/220	110	2	40
Limestone Electric Company	Limestone	Purchased	1-3	60	33,000	110/220	110		2
A. & R. Loggie Co., Ltd	Loggieville	Steam	D.C.		110	110	110		6
Canadian Cottons, Ltd.	Marysville	Steam	1-3	60	2,200	110	110	1	255
Canadian Pacific Railway Co	McAdam	Steam	3	60	2,200			2	
McAdam Electric Light Commission	McAdam	Purchased	3	60	2,200		110		310
The Minto Coal Co., Ltd	Minto	Steam	1-3	60	2,200	220	110		86
Moncton Tramways Electric and Gas Co., Ltd	Moncton	Purchased	1-2	60	2,300	550/220/110	110	94	4,317
Canadian Cottons Limited	Montreal (Millton)	Water	3	60	575	575		1	
The Town of Newcastle	Newcastle	Steam	1-2	60	2,200	220/110	110	9	597
Village of Port Elgin	Port Elgin	Purchased			220	220	220		76
Fred Magee Limited	Port Elgin	Steam	D.C.		220		220		2
Richibucto and Rexton Electric Light Commission	Richibucto	Water	1-3	60	2,200	220	110	4	119
The Eastern Electric and Development Co., Ltd	Sackville	Steam	1-3	60	2,200	2,200/220	220/110	11	469
The St. Andrews Electric Light and Power Co., Ltd	St. Andrews	Steam	1-3	60	2,200	220/110	110	3	214
Canadian Pacific Railway	St. Andrews-by-the-sea	Steam	3	60	2,200	2,200	2,200	1	
St. Basile Electric Co., Ltd	St. Basile	Water	1	60	2,200	110	110	3	26
St. George Pulp and Paper Company	St. George	Water	D.C.		550	550		1	
Town of St. George Corporation	St. George	Purchased	3	60	2,200		110		193
New Brunswick Power Company	St. John	Steam	1-3	60	2,300	2,300/220	110	308	6,085
New Brunswick Electric Power Com	St. John	Purchased	3	60	33,000			1	
New Brunswick Electric Power Com. (Supplying)	St. John	Water	1-3	60	132,000	550/220/110	110	34	
	Fairvale								150
	Hampton								240
	Norton-Apohaqui								315
	Petitcodiac Salisbury								500
	Shediac								500
	Westfield								510
Power Commission of City of St. John	St. John	Purchased	1-3	60	13,200	2,300/550 220/110	220/110	53	8,593
St. Joseph's College	St. Joseph	Steam	D.C.		115		110		6
St. Leonard Electric Co., Ltd	St. Leonard	Purchased	1-3	60		2,300	110	3	169
J. A. Vaughan	St. Martins	Oil	1-3	60	600		110		4
Associated Gas and Electric System	St. Stephen	Purchased	1-3	60	2,300	110/220	110	42	1,243
Calais Street Railway	St. Stephen	Purchased	3	60	2,200	220	110	7	6
Town of Sussex	Sussex	Purchased	1-3	60		220	110	33	518
Van Buren Light and Power District	Van Buren	Purchased	3	60	2,300	2,300	2,300	22	

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meter	
						Power	Lighting	Power	Lighting
St. John—Concluded									
Carleton Electric Company	Woodstock	Purchased	3	60	33,000			5	
Woodstock Electric Railway Light and Power Co.	Woodstock	Purchased	1–3	60	33,000	2,200/550 220/110	220/110	21	934
Total number of meters in District of St. John								972	33,840
Quebec—									
Phil Langlois	Armagh	Purchased	3	60			110		93
La Cie Electrique Baie St. Paul	Baie St. Paul		1–2	60	2,300	550	110		270
La Ville de Bagotville	Bagotville		1–3	60	2,400	550/110	110	1	
Le Pouvoir Electrique Lapointe Enr	Bergeronnes		3	60	2,200		110		17
The Bonaventure Pulp and Paper Co	Chandler	Steam	1–3	60	600	600	110	3	250
La Cie Electrique du Saguenay	Chicoutimi								
(serving)	Chambord and Val Jalbert	Purchased	3	60	13,000	550	110/220	5	300
	Chicoutimi and Rivière du Moulin		3	60	13,000	550	110/220	15	1,300
	Herbertville and St. Bruno, St. Gédeon, St. Jérôme and Desbiens Mills		3	60	13,000	550	110/220	15	700
	St. Prime		3	60	6,600	550	110/220	3	150
	St. Félicien		3	60	13,000	550	110/220	15	550
	Port Alfred and St. Alexis	Purchased	3	60	13,000	550	110/220	10	1,000
The Lake St. John Pulp and Paper Co., Ltd	Dolbeau	Purchased	1–3	60	550	100,000 2,200/550	110	22	215
Donnaconna Paper Co., Ltd	Donnaconna	Water	1–3	60	2,200	2,200/550	110/220	10	500
The Lake St. John Light and Power Co	Desbiens	Purchased	1–3	60	2,200	550	110	2	

Municipalite des Villages S. C. J.	East Broughton	Purchased	2–3	30	2,200	2,200	110	1	300
Electric Lights Ltd	Gaspé	Oil	D.C.		110				60
Duke Price Power Company, Ltd	Isle Maligne		3	60	13,200			14	
La Societe d'Eclairage	Jonquières	Purchased	1–3	60	2,200	220	110		40
Corporation de la Ville de Jonquiere	Jonquières	Purchased	3	60	2,300	2,300	2,300	13	623
Le Boulevard St. Dominique Ltée	Jonquières	Purchased	1	60			110	1	49
Price Bros. and Company, Ltd	Kenogami	Water	1–3	60	6,600	2,200	110	10	1,000
La Cie Electrique du lac Bouchette	Lac Bouchette	Water	2–3	60	1,100	110	110	1	30
Donohue Bros. Limited	La Malbaie		3	60	4,400	220/550	110/220	1	463
Davie Shipbuilding and Repairing Co., Ltd	Lauzon	Purchased	1–3	60	10,500	2,200/550	110/220	1	
La Municipalite des Ecureuils	Les Ecureuils	Purchased		60			110		90
Eugere Cote	L'Isle Verte	Water	1–3	60	2,500	220	110		86
Price Brothers and Company, Ltd	Matane	Water	3	60	2,200	220/550	110		71
La Corporation d'Energie de Montmagny	Montmagny	Water	1–3	60	2,400	2,400/550/220/110	230/115	89	2,276
Quebec—									
St. Francis Water Power Company serving	Montreal	Water	1–3	60	2,300	2300/550/220	115	131	6,206
	St. Henedine								54
	St. Marguerite								37
	Scott Jct							1	79
	St. Marie							16	239
	Lambton							3	92
	Courcelles								38
	St. Evariste							3	116
	St. Ephrem							2	53
	St. Victor							5	81
	Tring Jct							1	59
	St. Frederic								35
	Leeds							1	16
	Coleraine							2	31
	Disraeli							7	210
	Garthby								55
	St. Gerard								34
	Weedon							1	112
	Fontainbleau								13
	Sacré-Coeur de Marie								47
	St. Prosper							1	98
	St. Benoit								37
	Valley Jct							9	217
	St. Joseph							10	298
	Beauceville							12	324
	St. George							12	504
	St. Isidore								44
	St. Claire							1	51
	St. Gervais							1	49
	St. Anselme								148
	St. Lazare							1	34
	Armstrong								9
	St. Damien							1	40
	St. Martin								46

APPENDIX L—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Quebec—Concluded.									
St. Francis Water Power Company serving —*Concluded*.	St. Come							2	101
	St. Theophile								16
	St. Zacharie							1	75
	St. Agnes								18
	Frampton								38
	St. Germaine								61
	St. Honore							1	47
	Thetford Mines							31	2,090
	Black Lake							5	417
	St. Sebastien								43
La Municipalite du Village de Neuville	Neuville	Purchased	1	60	65,000	220	115		124
La Cie Electrique Plessis	Plessisville	Purchased	1–3	60		2,200/550	120	75	565
La Fonderie Suprême Limitée	Pont Rouge		3	60	2,300	550	110	1	210
The Quebec Harbour Commissioners	Quebec	Purchased	3	62½			110		20
Quebec Ry., Lt. Ht. & Pr. Co., Ltd	Quebec	Purchased	1–2–3	60	10,500/5,500 2,400	10,500/5,500 2,400/550/ 220/110	230/115	1,137	20,796
Quebec Power Company	Quebec	Water and Steam	1–2–3	60	6,600/2,400	2,400/550/ 440/220/110	230/115	743	11,087
La Compagnie de Pouvoir du Bas St. Laurent (serving)	Rimouski		1–3	60	2,300/4,000	550/220	115	55	3,539
	Cabano								199
	Rimouski Nord							7	237
	Rimouski Sud							8	170
	Bic							3	102
	Rimouski Ouest							2	132
	Sacrè-Coeur								45
	St-Anaclet							1	43
	Luceville and Ste. Luce							1	61
	Pte. au Père							1	18
	St. Donat								51
	St. Fabien								60
	Trois Pistoles							1	135
	St. Simon								24
	Amqui							4	51
	Lac-au-Saumon								100
	Val Brillant								44

	Sayabec							1	114
	St. Leon								25
	St. Moise							1	42
	Causapscal							1	69
	Matapédia								34
	Matane							9	293
	Rivière-Blanche								107
	Baie des Sables								57
	Mont Joli Nord								100
	Mont Joli Sud							10	264
	Price and Grand Métis							1	132
	Métis Beach								63
	St. Joseph de Lépage							1	6
	Ste. Angèle & Grd. Remous							1	60
	St. Octave							1	40
	Ste. Flavie							1	27
Price Brothers & Co., Ltd	Riverbend	Purchased	1–3	60	13,200	550	110		66
La Cité de Rivière-du-Loup	Rivière-du-Loup		2–3	60	2,300	220/550/110	110	21	1,550
La Cie Electrique Rivière à Pierre, Ltée.	Rivière à Pierre		3	60	2,300		110		29
A. Fillion	Robertsonville	Purchased	2–3	60		550	110	1	65
La Ville de Roberval	Roberval	Water	1	60	104/220		104		394
La Cie Electrique du Nord	Ste. Anne de Chicoutimi	Water	3	60	2,200	550	110		
Godias Croteau	St. Apollinaire				110		110		20
Hector Piche	St. Basile	Purchased	1–7	60	2,200		110		128
Municipalité du Village de Bernierville	St. Ferdinand		3	30	110	110	110	3	83
La Ville de St. Joseph d'Alma	St. Joseph d'Alma	Purchased	1–3	60	13,200	550	110	15	825
Montmorency Electric Limited	Ste. Petronille-Ile d'Orléans	Purchased	3	60	6,600	220	110		188
La Cie Laiterie de St. Pierre	St. Pierre	Purchased	1–3	60	6,600	550/220	110	4	150
La Compagnie d'Energie Electrique St. Siméon	St. Siméon		3	60	2,200		110		
St. Francis Light & Power Co., (serving)	Thetford Mines	Purchased	1–3	60		2300/550/220	115	13	542
	St. Narcisse								15
	St. Gillis								17
	St. Agapit							2	63
	St. Antoine								44
	St. Croix							4	103
	Lotbinière							1	68
	Leclercville								42
	St. Apollinaire								24
	St. Jean Deschaillons							5	109
	St. Jacques de Parisville							1	24
	St. Bernard								33
Total number of meters in District of Quebec								2,431	57,020

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Three Rivers—									
Howard Smith Paper Mills Ltd	Crabtree Mills		2-3	60	550		110		24
L. J. Dostaler	Grand'Mere	Purchased	3	60			2,200/110		220
J. O. Ricard	Grand'Mere	Purchased	1-3	60	2,200	220	110		185
La Cité de Grand'Mere	Grand'Mere	Purchased	1-3	60	110	110/220/250	110	25	1,500
Laurentide Power Company	Grand'Mere	Water	3	60	6,600	6,600		8	
La Corporation de la Cité de Joliette	Joliette	Purchased	1-3	60		2,200/550 220/110	110	55	2,175
Brown Corporation	La Tuque		1-3	60	2,300	550	110		126
Mattawin Power Co., Ltd	Montreal	Water	1-3	60	2,200	110	110	1	56
Electric Service Corporation (serving)	Montreal	Purchased	1-3	60		2,200/550/220	110	355	9,573
	Annaville							1	31
	Arthabaska							11	240
	Almaville							3	347
	Berthierville							26	491
	Glenada								19
	Grand'Mere							9	
	Joliette							11	
	La Gabelle								26
	Shawinigan Bay							3	224
	Lanoraie							2	134
	La Baie du Febvre							9	94
	Louiseville							16	475
	Nicolet							27	312
	Maskinonge							6	148
	Pierreville							8	191
	St. Justin							2	82
	St. Etienne des Gres							2	61
	St. Jean de Matha							1	61
	St. Felix de Valois							7	146

	Ste. Elizabeth							3	66
	St. Gregoire							10	94
	Ste. Thecle							5	187
	St. Tite							20	351
	St. Severin							1	52
	St. Adelphe							3	120
	St. Leon								48
	St. Barthelmey							3	148
	Shawinigan Falls							77	3,239
	Victoriaville							46	1,097
	Warwick							11	191
	St. Gabriel							3	
	St. Norbert							2	23
	St. Cuthbert							2	65
	Lavaltrie							5	79
	St. Thomas							1	40
	St. Ambroise							1	43
	St. Leonard							6	98
	St. Jacques des Piles							2	62
	Ste. Melanie								56
	St. Sulpice							1	77
	St. Wenceslas							1	18
	Ste. Monique							2	41
	St. Francois du Lac								30
	Yamaska							3	58
	Ste. Ursula							3	65
	St. Jean des Piles								33
	Ste Flore								20
	Hervey Junction								29
	St. Timothee								12
	St. Paul de Joliette								12
	St. Charles de Mandeville								32
	Odanak								5
St. Maurice Power Company	Montreal	Water	3	60	6,600	60,000		4	
Shawinigan Water & Power Co	Montreal	Water	3–2	30 & 60	13,200/ 6,600/2,200			100	
J. Beauparlant	St. Emile de l'Energie			60	2,200	110	90		20
Corporation du Village St. Gabriel de Branden	St. Gabriel de Branden.	Purchased	1–3	60	25,000	110/220/ 550	110	8	280
The Sorel Light & Power Co., Ltd. (serving)	Sorel	Purchased	1–3	60	11,000	550	220/110	76	3,165
	Sorel							45	1,856
	St. Joseph de Sorel							5	290
	St. Anne de Sorel								33
	St. Ours							4	134
	St. Roch							1	54

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Three Rivers—Concluded									
The Sorel Light & Power Co., Ltd. (serving)—*Concluded*	Contrecoeur							8	167
	Verchères							7	135
	Varennes							2	127
	Boucherville							2	216
	St. Denis							1	101
	St. Antoine							1	52
North Shore Power Company (serving)	Three Rivers	Purchased	1-3	30 & 60		550	110/220	324	13,021
	Banlieu & Pte. du Lac							2	233
	Batiscan							5	175
	Champlain							1	168
	Charette								82
	Cap de la Madeleine							27	1,835
	Deschambault							6	83
	Grondines								50
	Lachevrotiere							1	11
	La Perade							9	193
	Montauban							1	66
	Notre Dame des Anges							1	73
	Piles Jct								4
	Portneuf							8	271
	St. Alban							4	99
	Ste. Angele de Laval							1	139
	St. Barnabe							1	109
	St. Basile							3	17
	St. Boniface								88
	St. Casimir							17	330
	St. Elie de Caxton								50
	Ste. Genevieve							6	125
	St. Leonard								27
	St. Louis de France							2	9

	St. Maurice							1	136
	Ste. Marguerite Rd							2	58
	St. Mars							18	227
	St. Narcisse							2	180
	St. Paulin							2	82
	St. Prosper								112
	St. Raymond							11	430
	St. Severe								37
	St. Stanislas							1	139
	St. Ubald								47
	Three Rivers							192	7,174
	Yamachiche								164
Total number of meters in district of Three Rivers								956	30,345
Montreal—									
La Municipalite du village d'Asbestos	Asbestos	Purchased	1	30	2,200	220	110	23	716
Ascot Tile and Brick Co., Ltd	Ascot Corner	Purchased	1	60	48,000	110	110	1	10
La Ville de Beaconsfield	Beaconsfield	Purchased	1	60		2,200	2,200/110		83
La Ville de Beloeil	Beloeil	Purchased	2/3	60		550	110	8	501
The Sorel Light and Power Co., Ltd	Boucherville	Purchased	1-3	60	11,000	550	220/110	3	216
The Belmont Park Co., Ltd	Cartierville	Purchased	2-3	60	2,200	220	110	16	22
Bennett Limited	Chambly Canton	Purchased	2-3	63	2,100	2,100/550/220/110	110	50	450
Corporation of Coaticook	Coaticook	Water	1-3	60	2,300	550/220/110	110		940
St. Germain Raymond and Cuddily	Cote de Liesse	Purchased	3	60	2,200		110		22
La Municipalite du Village de Danville	Danville	Purchased	3	60	2,200	2,200/220/110	110	13	386
La Ville de Dorval	Dorval	Purchased	3	60		2,200/550/220	110	3	500
Canadian Celanese Limited	Drummondville	Purchased	3	60	4,000		110		12
Gendreau and Durocher	Dixville	Purchased			110		110		6
Town of Greenfield Park	Greenfield Park	Purchased	1-3	60		2,200	110	1	345
Wilfred Lorrain	L'Abord a Plouffe	Purchased				2,200	110		21
La Corporation de la Cité de Lachine	Lachine	Purchased	3	60	13,000	1,100/550	110	146	3,934
La Corporation de la Ville Laprairie	Laprairie	Purchased	1-3	60	2,200	550	110	16	448
La Corporation de la Ville de Magog	Magog	Water	2	60	2,400	2,200	108		1,205
Dudswell Electric Company	Marbleton	Purchased	1-3	60	2,200	550	110	8	157
La Ville de Marieville	Marieville	Purchased	1-2	60	2,200	550	110		448
La Corporation de la Ville de Mégantic	Mégantic	Water	3	60	6,600	550	110	10	615
La Cie Laurentian Water and Power	Mount Laurier	Water	1-3	60	2,300	220/440/550	110	2	128
Le Téléphone et la Lumière de Rivière des Prairies Limitée	Montreal	Purchased	1-3	60	2,200		110		70
Harbour Commissioners	Montreal	Purchased	1-3	62½	12,000	2,300/550	120	50	60
Sherbrooke Street Railway Corporation	Montreal	Purchased					220/110		8
Montreal Light, Heat and Power Cons	Montreal	Water and steam	1-2-3	60	2,200/4,400 6,600/12,000	115/70,000	115/230	3,947	208,305
South Shore Services Limited	Montreal	Purchased	1-3	62	2,300	550	110		90

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Montreal—Continued									
Canadian Explosives Limited	Montreal	Purchased	1–3	60		550	110		60
The Garment Centre Capital Inc	Montreal	Purchased	1–3	60		575	110/220		48
The Continental Heat and Light Co	Montreal	Purchased	3	30		50,000/2,000		6	
The Mount Royal Hotel Co., Ltd	Montreal	Purchased	1	63	230/110	230/2,200	115/110	4	17
The Southern Canada Power Co., Ltd. (serving)	Montreal	Water	1–3	60	2,200	550	110	338	30,498
	Abbotsford								52
	Actonvale							7	343
	Ayers Cliff							3	190
	Bedford							3	370
	Beebe							9	228
	Belœil							4	
	Brome								36
	Bromptonville								332
	Bury								150
	Canrobert								47
	Capelton								26
	Clarenceville								21
	Compton								78
	Cookshire							5	263
	Cowansville							7	434
	Drummondville							32	1,170
	Dunham							1	101
	East Angus							1	733
	East Farnham							2	45
	Eastman								62
	Eaton Corner								22
	Eustis							2	20
	Farnham							11	935
	Foster							1	79
	Frelighsburg								67
	Granby							28	1,864
	Graniteville							6	22
	Hatley								37
	Henryville								48
	Huntingville								27

Iberville							12	618
Kingsbury								46
Knowlton							2	372
L'Acadie								35
Lennoxville							20	600
Libbytown								4
Magog							2	
Massawippi								21
Melbourne							1	106
Mount St. Hilaire								50
North Hatley							5	244
Pike River								15
Providence								252
Reedville							1	29
Richmond							6	742
Rock Island							7	377
Rougemont							1	132
Roxton Falls							1	107
Roxton Pond							1	94
Sawyerville								125
South Durham								100
Stanbridge East							1	58
Stanbridge Sta								25
Stanstead							3	172
Sutton							9	270
Sutton Jct								15
Sweetsburg								76
Ste. Angèle							1	54
St. Antoine							2	65
St. Barnabé							1	64
St. Blaise								66
Ste. Brigide								27
St. Cesaire							4	228
St. Cyrville							3	119
St. Damase							1	45
St. Dominique								75
St. Germain							7	81
Ste. Helène								48
St. Hilaire							1	81
St. Hugues							1	118
St. Hyacinthe							51	2,722
St. Johns							42	2,353
St. Joseph (Drummond)								237
St. Joseph (St. Hyacinthe)								133
St. Jude							1	61
St. Liboire							1	80
St. Luc								23
Ste. Madeleine							3	89
St. Mathias								45

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Montreal—Continued									
The Southern Canada Power Co., Ltd.—	St. Pierre								61
(serving)—*Concluded*	St. Rosalie							3	140
	St. Sébastien								29
	St. Simon							1	56
	Upper Melbourne							1	51
	Upton							1	
	Warden								32
	Waterloo							9	495
	Waterville							9	175
	Ways Mills							1	29
	West Brome								28
	West Shefford								101
Electric Service Corportion	Montreal	Purchased	1-3	60		2,200/550/220	110	72	3,940
(serving)	Ste. Therese							24	675
	Rosemere							1	170
	Ste. Rose							5	425
	L'Epiphanie							4	197
	Repentigny							1	90
	L'Assomption							10	264
	Charlemagne							5	130
	St. Paul L'Ermite							1	83
	St. Eustache								
	Grand Cote							4	360
	Grand Fresniere								
	St. Eustache sur le Lac								179
	Laval sur le Lac								166
	Plage Laval								18
	St. Elzear							1	49
	Belanger Village								
	Canton Belanger								28
	Cap St. Martin							1	41
	Oka							2	111
	St. Janvier							1	70

	Ste. Annes des Plaines								117
	Ste. Dorothee							1	105
	Mascouche							1	128
	Lachenaie								88
	St. Francois de Salles							1	125
	Bois de Filions							1	47
	Terrebonne West							4	19
	St. Joseph du Lac								70
	Pointe aux Calumet								8
	St. Vincent de Paul								110
	Joliette							4	
	St. Martin								167
Beauharnois Electric Co., Ltd. (serving)	Montreal	Water	1–3	60	2,200	220/550	110	91	5,250
	Beauharnois							12	489
	Melocheville							1	28
	DeLery							4	112
	Maple Grove								15
	Town of Chateauguay							5	204
	St. Joachim							7	86
	St. Philomene							1	39
	St. Isidore							1	95
	St. Remi							13	222
	St. Timothee Village								83
	St. Timothee Parish							1	11
	St. Louis de Gonzaque							3	102
	Valleyfield							1	1,957
	St. Stanislas								45
	St. Etienne								16
	Huntingdon							14	420
	Athelstan								61
	Howick							2	127
	Trout River							1	51
	Dewittville								29
	Ormstown							6	261
	St. Constant							1	87
	Delson							2	70
	Laprairie							1	44
	Caughnawaga							6	83
	St. Michel								52
	St. Edouard								17
	St. Chrysostome							5	70
	St. Clothilde								13
	Hemmingford							3	104
	St. Hubert							1	97

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Montreal—Concluded									
Beauharnois Electric Co., Ltd. (serving)—*Concluded*	St. Lambert Annex								65
	East Greenfield								46
	Springfield								16
	St. Lambert Annex–Laprairie Rd								14
	Chambly Road Longueuil								19
Wallace Sandstone Quarries, Ltd	Phillipsburg	Purchased	3	60	13,000	550	110		80
La Ville de Pointe Claire	Pointe Claire	Purchased	1–3	60	2,200	550/110	110	11	1,358
Public Utilities Vermont Corporation	Richford	Purchased	1–3	60	2,300	220	110	1	52
Ville St. Agathe des Monts	St. Agathe des Monts	Water	2–3	60	2,200	220/550	110	50	700
La Corporation de la Ville de Ste. Anne de Bellevue	Ste. Anne de Bellevue	Purchased	2–3	60		2,300/550/220/110	110	22	717
Mrs. R. A. B. Audette	St. Albans	Purchased	1	60	2,200		110		28
South Shore Lt., Ht. & Pr. Corporation	St. Bruno	Purchased	2–3	60		550/110	110	12	330
The Pierrefonds Electric Co., Ltd	St. Genevieve	Purchased			2,300	500	110		395
La Corporation du Village de St. Hilaire	St. Hilaire	Purchased	1–3	60	2,200		110		227
South Shore Lt., Ht. & Pr. Corporation	St. Guillaume	Purchased	2–3	60		110/550	110	5	225
Mde. Jos. Vauchesteing	St. Jovite Station		3	60	2,300		110		118
The City of St. Lambert	St. Lambert	Purchased	3	60	2,300	220/550/2300	100	14	1,699
James Gorden Dunn	St. Martine	Water	1–3	60	2,400	550	110		175
Puisine Electrique	St. Roch L'Achigan		1	60	2,200		110		
La Municipalite de St. Vincent de Paul	St. Vincent de Paul	Purchased	1–3	60	2,300	2,300	110	3	330
Scotstown Electric Light & Power Co	Scotstown	Water	3	60	2,200	550	110		125
Sherbrooke Railway and Power Company	Sherbrooke	Water	3	60	2,200	550			
The City of Sherbrooke	Sherbrooke	Purchased	1–3	60	6,600/2,300	2,200/550/440/220	110	131	5,944

Village de Senneville	Senneville	Purchased	2-3	60	2,200/550/220/110	2,200/550/220/110	110	8	105
La Ville de Terrebonne	Terrebonne	Purchased	1-3	60		220	110	11	635
Adrien Meilleur	Val Barrette	Purchased	3	60	2,200	110	110		24
Corporation of the City of Verdun	Verdun	Steam	3	60 & 63	2,300	2,300/550 440/220/110	110	100	5,464
City of Westmount	Westmount	Steam	1-3	60	2,300	550	110	687	3,765
La Corporation de la Ville de Windsor	Windsor	Purchased	3	30		220	110	12	446
Total number of meters in District of Montreal								5,875	282,453
Ottawa (in province of Ontario)—									
Public Utilities Commission	Alexandria	Purchased	3	60	2,300	550/220	115	14	344
Almont Electric Light Com	Almonte	Water	1-3	60	220	220/550	110/220	3	655
Apple Hill Hydro System	Apple Hill	Purchased	1-3	60		220	110	1	53
Galetta Electric Pr. & Milling Co., Ltd	Arnprior	Purchased	1-3	60	2,200	550	110	21	1,174
(serving)—	Arnprior							9	896
	Carp							4	131
	Kinburn							3	48
	South March								19
	Braeside							5	67
	Sand Point								13
Barry's Bay Electric Lt. Co	Barry's Bay		1-3	60	2,200	220/550	110		
Cardinal Electric Lt. Co.,Ltd	Cardinal	Steam	1-3	60	220	220	110		238
The Public Utility Commission	Carleton Place	Purchased	1-3	60	4,400	2,200/550/220	110/220	29	1,042
J. N. Coupal	Casselman	Water	1-3	60	2,300	440/550/110	110	1	
Hydro Electric Commission	Casselman	Purchased	1	60			110		37
Chesterville Hydro Electric System	Chesterville	Purchased	1-3	60		220	110	4	250
Village of Cobden	Cobden	Water	3	60	2,300	550	110	2	146
St. Lawrence Power Co., Ltd. (serving)	Cornwall	Water	3	60	2,200	11,000/550	110	7	390
	Cornwall							6	70
	Mille Roche							1	142
	Moulinette								50
	Dickinson's L'd'g								28
	Wales								60
	Lunenburg								22
	St. Andrews								18
Stormont Electric Lt. & Pr. Co., Ltd	Cornwall	Purchased	1-3	60	2,300	220/550	110/220		3,191
A. Mills	Eganville	Water		60	2,300	220	110	1	100
Village of Finch	Finch	Purchased	1	60	2,200		110/220		80
Canadian International Paper Co	Hawkesbury	Purchased	3	60	16,500	550	110	2	59
Beach Rural Electric System	Iroquois		1-3	60	2,200	220	110	4	236
Corporation of Village of Iroquois	Iroquois	Purchased	1-3	60	2,200	110/220/550	110/115	10	221
Public Utilities Commission	Lanark	Purchased	1	60	2,200	220	110	2	131
Ottawa—									
Lancaster Public Utilities Company	Lancaster	Purchased	1	60			110	1	102
Police Trustees	Martintown	Purchased	1	60	2,200		110		46

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Ottawa—Concluded									
Hydro Electric Power Company	Maxville	Purchased	1–3	60	2,200	550	110/220		182
Judson Watchorn	Merrickville	Water	1–3	60	10,000	220	110		8
The Rideau Power Co., Ltd	Merrickville	Water	1–3	60	600	600	110/220		214
Morrisburg Electric Light & Power Co.	Morrisburg	Water	1–3	60	2,200	220/550	110	6	405
Gatineau Elec. Light Co., Ltd. (serving)	Ottawa	Purchased	1–3	60				23	1,077
	Alfred							2	
	Caledonia Springs								4
	Hawkesbury							15	662
	L'Original								89
	Rockland							1	
	St. Eugéme							1	70
	Vankleek Hill							3	252
	Riordon							1	
The Ottawa Electric Company	Ottawa	Water & Steam	1–2–3	60	11,000/2,300	550	107	541	24,691
Ottawa Hydro Electric Company	Ottawa	Water	1–2–3	60	11,000	440/550	110	176	12,837
W. H. Edwards	Pakenham	Water	1	133	1,000		110		
Pembroke Electric Light Co., Ltd	Pembroke	Water	1–3	60	2,500	2,200	110	10	2,051
Perth Hydro Electric System	Perth	Purchased	1–3	60	4,400	2,200/550/220	110/220	21	979
Water and Light Commission	Prescott	Purchased	1–3	60		220	110	22	810
Calabogie Light & Power Co.	Renfrew	Water	1–3	60	6,600	550	110	2	90
(serving)	Renfrew							2	
	Horton								24
	McNab								2
	Calabogie								55
	Barryvale								9
Renfrew Municipal Light Department	Renfrew	Water	1–2–3	60	2,200	110/220/440/550	110/220		1,195
Hydro Electric System	Richmond	Purchased	1	60			110/220		67
Corporation of Town of Rockland	Rockland	Water	3	60	6,600	440/220/500	110/220	2	440
Hydro Electric System of Russell	Russell	Purchased	3	60		220	110		128
Smiths' Falls Hydro Electric System	Smiths Falls	Purchased	1–3	60	2,400	550/220	115	38	1,803
Hydro Electric Power Com. (serving)	Toronto								
	Apple Hill R.P.D.	Purchased	1–3	60	4,160/2,200	110/220	110/220	1	73

	Chesterville R.P.D.	Purchased	1-3	60	4,160	110/220	110/220		103
	Cornwall Trans. Station	Purchased	3	60		44,000		3	
	Dalhousie Lake R.P.D.		1	60		110/220			4
	Deeks, metering equipment	Purchased	3	60		600		2	
	Martintown R.P.D.	Purchased	1-3	60	4,160	550	110/220	1	74
	Maxville R.P.D.	Purchased	1-3	60	4,160/2,200	110/220	110/220		1
	Nepean R.P.D.	Purchased	1-3	60		220	110/220	2	380
	Prescott R.P.D.	Purchased	1-3	60		220	110/220	1	68
	Williamsburg R.P.D.	Purchased	1	60	2,200		110/220		6
Williamsburg Hydro Electric System	Williamsburg	Purchased	1-3	60		220	110	1	66
Winchester Hydro Electric System	Winchester	Purchased	1-3	60		220	110	3	331
Ottawa (in Province of Quebec)—									
The James Maclaren Co., Ltd	Buckingham	Water	3	60	550	550/220	110	5	20
Albert Maclaren Electric Light	Buckingham	Water	2-3	60	2,200		110		
Ottawa River Power Company	Bryson	Water	3	60	6,600	11,000/66,000			
G. E. Higginson	Calumet	Water	2	60	1,100	110	110		25
Pontiac Power & Development Co., Ltd	Campbell's Bay	Water	3	60	2,200	550	110		66
F. T. Cross	Farm Point	Water	1-3	60	4,400	550	110		184
Ottawa and Hull Power Co	Hull, Plant 1	Water	2-3	60	2,300/11,000	2,300		4	
Ottawa and Hull Power Co	Hull, Plant 2	Water	3	60	2,300	11,000		2	
The Argenteuil Lumber Co., Ltd	Morin Heights	Water	1	60	1,100		110		33
Gatineau Electric Light Co.	Ottawa	Purchased	1-3	60		550/220	110/220	214	14,270
(serving)	Arundel								44
	Aylmer							2	767
	Belle Plage								57
	Belle Rivière							2	40
	Burbridge								19
	Bouchette							1	29
	Blue Seas								8
	Brownsburg							1	317
	Calument Island								26
	Campbells Bay							1	124
	Cascades							1	63
	Cedars							3	128
	Cheslea								26
	Chêneville								34
	Caledonia Springs								4
	Carillon								41
	Choisy								11
	Como								102
	Coteau Station							2	206
	Coteau Landing							1	69
	Coteau du Lac							1	74
	Cushing								16

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Ottawa (in Province of Quebec)—Continued									
Gatineau Electric Light Co. (serving)—*Continued*									
	Cote le Boucane								10
	Dêchesne							2	168
	Dragon								4
	Fassett							2	
	Grenville							2	102
	Greece's Point								9
	Gracefield							2	63
	Gatineau Div. No. 4							1	290
	Gatineau Point								18
	Harrington							1	20
	Hudson							3	119
	Hudson Heights								187
	Huberdeau								39
	Hull							42	3,203
	Isle Cadieux								10
	Ile Perrot								66
	Ironsides								10
	Ivry								13
	Kirk's Ferry								3
	Lesage								15
	Le Cordon								32
	Lachapelle								18
	L'Annonciation								112
	Laurentides							9	367
	Lacolle							1	109
	Low							1	67
	Lachute							10	771
	Montebello							1	133
	Mont Rolland							1	126
	Montcalm								28
	Maniwaki							17	196
	Mantel								11
	New Glasgow								51

Napierville							8	114
Papineauville							3	114
Plaisance								12
Piedmont								10
Portage								10
Point Fortune								49
Point-au-Chêne								12
Ripon							2	37
Rawdon							5	179
Riguad							10	194
Shawbridge							3	87
Shawville							8	169
Sherrington							1	28
Ste. Adèle								127
Ste. Agathe							3	18
St. Alexis							2	189
St. Augustin							3	53
St. Antoine							1	29
St. Andrews							3	124
St. Andre Avellin							6	94
St. Benoit							1	48
St. Calixte								38
St. Clet							2	87
St. Canute							1	47
St. Esprit							5	169
St. Faustin								88
St. Georges								33
St. Hermas								83
St. Jacques							6	364
St. Jerome							15	1,613
Ste. Julienne								73
St. Justine de Newton								31
St. Lèguori							1	51
St. Marguerite (Lac Masson)								88
Ste. Marthe								22
Ste. Monique							1	80
St. Placide								51
St. Phillippe D'Argenteuil							2	50
St. Phillippe							1	33
St. Polycarpe							2	90
St. Roch							1	129
Ste. Scholastique							3	155
Ste. Sophie								17
St. Sauveur								62
St. Zotique								55
Staynerville								13
Thurso							1	
Val David								29

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Ottawa (in Province of Quebec)—Concluded									
Gatineau Electric Light Co. (serving)—*Concluded*	Val Morin							2	115
	Vaudreuil Station							1	238
	Vaudreuil Village							1	115
Gatineau Power Company (serving)	Ottawa								
	Bell Falls	Water	3	60	2,300			3	
	Chelsea Falls	Water	3	25–60	6,600	6,600		3	
	East Templeton	Water	3	60	6,600	550	110	5	
	Farmers Falls	Water	3	60	6,600	6,600		3	
	High Falls	Water	3	60	6,600			1	
	L'Annonciation	Water						1	
	Maniwaki	Water	3	60	2,300			2	
	Rawdon	Water	3	60	6,600			2	
	Ripon	Water	3	60	2,300			1	
	St. Adele	Water	3	60	6,600			2	
	St. Jerome	Water	3	60	6,600			2	
	Table Falls	Water	3	60	10,000			3	
	Thurso	Water	3	60	6,600			1	
	Wilson Chute	Water	3	60	2,300			2	
La Corporation de la Pointe Gatineau	Pointe Gatineau	Purchased	1	60		208	104	2	153
The National Hydro Electric Co	Pointe Fortune	Water	3	60	2,200		110		
Quyon Milling Corporation	Quyon		3	60	110/220		110		35
Corporation of Thurso	Thurso	Purchased	1–3	60	6,600		110/220	1	246
Ottawa River Power Company	Val Tetreau		3	60		11,000		5	
Total number of meters in District of Ottawa								1,223	70,901
Belleville—									
Bancroft Light and Power Co	Bancroft	Water			125		125		
Alex. Irwin	Beaverton	Purchased	1–3	60		110/220	110	10	395
(serving)	Brechin	Purchased	1–3	60		110/220	110	4	62
	Kirkfield	Purchased	1–3	60		110/220	110	1	34
J. P. Lett and Bro	Bedford Mills	Water	3	60	4,000	220	110		10

Hydro-Electric Power Com. of Ontario	Belleville	Water	3	60	44,000	550/250/110	110/220	81	3,282
Hydro-Electric Power Com. of Ontario	Bloomfield	Purchased	1-3	60	2,400	110/220	110	8	160
The Electric Light Commission	Bobcaygeon	Water	3	60	2,200	220/550	110	.....	205
Hydro-Electric Power Com. of Ontario	Bowmanville	Purchased	1-3	60	44,000	220/440/550	110/220	36	1,110
Hydro Electric Power Com. of Ontario	Brighton	Purchased	1-3	60	44,000	220/550	110/220	7	368
Brockville Public Utilities	Brockville	Purchased	1-3	60	2,200	550/220/110	220/110	65	2,680
Water and Light Commission	Campbellford	Water	1-3	60	2,500	4,325/2,500	115/230	14	938
Sherman R. Belfry	Cannington	Purchased	1-3	60	.....	220	110/220	12	319
Hydro-Electric Power Com. of Ontario	Cobourg	Purchased	1-3	60	.....	220/440/550/2,200	110/220	42	1,274
G. M. Peebles Estate	Colborne	Purchased	1	60	44,000	220	110	6	285
Hydro-Electric Power Com. of Ontario	Deseronto	.....	1-3	60	.....	2,300/550/220	115	14	332
Delora Smelting and Refining Co., Ltd.	Delora	Purchased	1-3	60	44,000	550	110	.....	38
James Hoffman	Delta	Purchased	3	60	2,200	.....	110	.....	60
Board of Water, Light and Power Com.	Fenelon Falls	Water	1-3	60	550	550	110	.....	306
Frankford Electric Light Co., Ltd.	Frankford	Purchased	1-3	60	6,600/2,200	220	110	7	260
The Gananoque Electric Light and Water Supply Co., Ltd.	Gananoque	Water and steam	3	60	2,400/250	550	115	30	880
Haliburton Electric Light Commission	Haliburton	Water	1-3	60	2,300	110/220/550	110	.....	120
Fowlds Company, Limited	Hastings	Water	1-2	60	2,200	110/220	110	.....	10
Havelock Hydro-Electric Commission	Havelock	Purchased	1-3	60	44,000	220/550	110/220	3	337
Wm. Plunkett	Keene	Water	2-3	60	2,200	.....	110		
Public Utilities Commission	Kingston	Purchased	3	60	2,300	550	110/220	132	5,775
Hydro-Electric Commission	Lakefield	Purchased	1-3	60	6,600	220/550	110/220	8	375
Lindsay Hydro-Electric System	Lindsay	Water	1-3	60	550	550/220	110/220	71	2,085
Reginald Bracken	Lyndhurst	.....	1-3	60	2,200	220	110	.....	50
The Corporation of Madoc Village	Madoc	Purchased	1-3	60	.....	220	110/220	10	340
Marmora Hydro Commission	Marmora	Purchased	1	60	44,000	110/220	110/220	3	195
Hydro-Electric Power Com. of Ontario	Millbrook	Purchased	1	60	.....	220/110	220/110	1	215
Hydro-Electric Power Com. of Ontario	Napanee	.....	1-3	60	.....	2,300/550/220	115	31	907
Hydro-Electric Power Com. of Ontario	Newburgh	.....	1-3	60	.....	2,300/550/220	115	4	142
Hydro-Electric Power Com. of Ontario	Newcastle	Purchased	1-3	60	44,000	110/220	110/220	3	200
Hydro-Electric Power Com. of Ontario	Norwood	Purchased	1-3	60	44,000	550/220	110/220	3	275
J. H. Babcock	Odessa	.....	2	100	2,200	110/220	110	.....	43
Hydro-Electric Power Commission	Omemee	Purchased	1-3	60	.....	220	220/110	6	158
Hydro-Electric Power Com. of Ontario	Orono	Purchased	1	60	.....	110/220	110/220	6	189
Hydro-Electric Power Com. of Ontario	Oshawa	Water	1-3	60	4,000	550	110/220	82	5,569
Utilities Commission	Peterborough	Purchased	1-3	60	44,000	2,200/550/220	110/220	224	6,698
Picton Public Utilities	Picton	Purchased	1-3	60	.....	2,200/550/220	110/220	48	1,094
Hydro-Electric Power Com. of Ontario	Port Hope	Purchased	1-3	60	.....	2,200/550/220	110/220	61	1,445
Hydro-Electric System	Port Perry	Purchased	1-3	60	.....	220/550	110/220	12	308
Electric Department, Village of Stirling	Stirling	Purchased	1-3	60	44,000	120/240	120	5	75
S. R. Belfry	Sunderland	Purchased	1-3	60	.....	220	110/220	13	145
Frank Anglin	Sydenham	.....	3	60	2,300	.....	110	.....	95
A. B. Carscallen Co., Ltd.	Tamworth	Water	.....	.....	110	.....	110	.....	.....

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Belleville—Concluded									
Hydro-Electric Power Com. of Ontario....	Toronto.....	.....	.....	.....	.....	.....	.....	.....	.....
(serving).....	Belleville, R.P.D.	.....	1-3	60	2,300	2,300/220	220/110	2	314
	Brockville R.P.D.....	.....	1-3	60	.....	220	110/220	2	37
	Campbellford R.P.D.....	.....	1	60	6,600	220	220/110	1	30
	Cannington R.P.D. No. 1...	.....	1-3	60	.....	220	110/220	2	19
	Cannington R.P.D. No. 2...	.....	1-3	60	.....	220	110/220	17	19
	Cobourg R.P.D..	.....	1	60	2,300	.....	220/110	.....	31
	Colborne R.P.D..	.....	1	60	2,300	.....	220/110	.....	67
	Kingston R.P.D..	.....	1-3	60	.....	220	110	2	75
	Mariposa R.P.D..	.....	1-3	60	.....	220	110/220	1	136
	Oshawa R.P.D...	.....	1-3	60	4,000/2,300	550/220	220/110	2	516
	Peterboro R.P.D.	.....	1	60	4,000/2,300	220	110/220	1	652
	Pickering R.P.D.	.....	1	60	4,000/2,300	220	110/220	1	108
	Port Hope R.P.D.	.....	1	60	2,300	.....	220/110	.....	30
	Port Perry R.P.D.	.....	1	60	.....	.....	110/220	.....	41
	Trenton R.P.D...	.....	1	60	2,300	.....	220/110	.....	26
Hydro Electric Power Com. of Ontario....	Wellington, R.P.D.....	.....	1-3	60	4,160	110/220	110/220	.....	5
	Uxbridge, R.P.D.	.....	1	60	.....	.....	110/220	.....	5
Hydro Electric Power Com. of Ontario....	Trenton.....	Purchased.....	1-3	60	6,600	110/220/550 2,200/6,600	110	75	1,325
Hydro Electric Power Com. of Ontario....	Tweed.....	Purchased.....	1-3	60	4,160	220/550	110/220	14	340
Uxbridge Utilities Commission.....	Uxbridge.....	Purchased.....	1-3	60	.....	110/220	110	11	350
Victoria Rd. Mutual Electric Assoc.....	Victoria Rd.....	Purchased.....	3	60	.....	220	110	1	25
Warkworth Hydro Elec. Com.....	Warkworth.....	Purchased.....	1	60	.....	.....	110	.....	132
The Public Utility Commission.....	Whitby.....	Purchased.....	1-3	60	4,000/44,000	220/550	115	13	914
Public Utilities Commission.....	Wellington.....	Purchased.....	1-3	60	2,400	110/220	110/220	8	310
Sherman R. Belfry.....	Woodville.....	Purchased.....	1-3	60	.....	220	110/220	3	130
Total number of meters in District of Belleville.....	.....	.....	.....	.....	.....	.....	.....	1,219	45,480

Toronto—									
Police Village of Agincourt	Agincourt	Purchased	1–3	25	2,300/4,000	550	110/220	2	140
Police Utility Commission	Alliston	Purchased	1–3	60	22,000	220/550	110	13	429
Hydro Electric Commission	Arthur	Purchased	3	60	.....	220	110	4	198
Town of Aurora	Aurora	Purchased	1–3	25	4,000	550	110/220	12	701
D. C. Carruthers	Avening	.....	D.C.	.....	110	110	110	.....	.....
James Booth	Ayton	.....	3	60	2,300	2,300	120	.....	45
The Police Village of Ayton	Ayton	Water	1–3	60	2,300	.....	110	.....	56
Bala Elec. Lt. & Power Co., Ltd	Bala	Water	1–3	60	2,300	550/220/110	110	3	211
Barrie Elec. Lt. Dept	Barrie	Purchased	1–2	60	2,200	2,200/220/110	220/110	33	2,035
Beeton Hydro Elec. Com	Beeton	Purchased	1–3	60	22,000	550/220/110	110/220	6	142
Scarboro Hydro Elec. Com	Birch Cliff	Purchased	1–3	25	.....	550	110/220	26	3,866
Bolton Hydro Elec. System	Bolton	Purchased	1–3	25	.....	550	110	8	178
Corporation of Bracebridge	Bracebridge	Water	1–2	60	2,200	220/2,200	110/220	1	659
Bradford Hydro Commission	Bradford	Purchased	3	60	.....	550	110/220	7	229
John McMurchy	Brampton	.....	3	25	2,200	550	110	2	2
Hydro Electric Commission	Brampton	Purchased	1–3	25	1,300	550	110	49	1,520
The Knight Brothers Co., Ltd	Burk's Falls	Water	1–3	60	2,300	.....	110	.....	68
G. W. Collins	Chatsworth	Purchased	1–3	60	22,000	220	110	1	91
Clifford Hydro Electric System	Clifford	Purchased	1	25	.....	220	110/220	.....	110
Corporation of Village of Coldwater	Coldwater	Purchased	.....	60	220	550	110	4	172
Public Utilities Commission	Collingwood	Purchased	1–3	60	4,000/8,000	2,200/550/220	110/220	55	1,579
Toronto Twp. Hydro Elec. System	Cooksville	Purchased	1–3	25	13,200/4,200 2,200	220/550	110	14	1,644
Hydro Electric System	Cookstown	Purchased	2–3	60	.....	220	110	2	124
The Creemore Hydro Elec. System	Creemore	Purchased	3	60	2,200	220	110	2	206
Canadian National Railway System	Depot Harbour	Purchased	.....	.....	.....	.....	.....	.....	38
Drayton Hydro Commission	Drayton	Purchased	1–3	25	.....	550	110	5	200
Dundalk Hydro System	Dundalk	Water	3	60	22,000	220	110	3	200
Hydro Electric Com	Durham	Purchased	1–3	60	22,000	220/550	110	7	413
The Village of Elmvale	Elmvale	Purchased	3	60	2,200	220	110	10	183
Hydro Electric Commission	Elora	Purchased	1–3	25	13,200/4,000	550	110/220	6	349
Caledon Electric Co., Ltd	Erin	Water	1–3	60	2,200	550	110	7	658
Fergus Hydro Elec. System	Fergus	Purchased	1–3	25	13,000	550	110/220	18	624
Flesherton Village	Flesherton	Purchased	1	60	.....	550	110	1	144
Grand Valley Hydro Elec. System	Grand Valley	Purchased	1–3	60	2,200	110/220/550	110	2	177
Gravenhurst Lt. and Water Commission	Gravenhurst	Water	1–2–3	60	38,000	220/110	110	12	454
Board of Lt. & Ht. Commissioners	Guelph	Purchased	3	25	.....	575	110/220	118	6,491
Public Utilities Commission	Hanover	Water	1–3	60	4,000	110/220/550	110/220	.....	764
Hydro Elec. Power Com	Harrison	Purchased	1–3	25	4,400	550	110	12	365
Holstein Hydro Commission	Holstein	Purchased	1–3	60	22,000	220	110	1	59
Huntsville Public Utilities Com	Huntsville	Purchased	1–3	60	6,600	220/550	110	8	642
Etobicoke Twp. Hydro Elec. Com	Islington	Purchased	3	25	4,000	550	110/220	24	3,700
Corporation of Village of Markdale	Markdale	Purchased	1–3	60	.....	110/220	110/220	9	244
Markham Hydro System	Markham	Purchased	1–3	25	2,200	220/550	110	8	296
Public Utilities Commission	Meaford	Purchased	1–3	60	.....	220	110/220	13	706
Midland Public Utilities Com	Midland	Purchased	1–3	60	22,000	2,200/220/110	220/110	59	1,776

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Toronto—Continued									
Public Utilities Com	Mimico	Purchased	1-3	25	4,000	550	115/230	16	1,585
Moorefield Hydro Elec. Pr. Com	Moorefield	Purchased	1-3	25	.....	550	110	4	75
Mt. Forest Water & Lt. Com	Mt. Forest	Purchased	1-3	60	.....	220	110/220	14	473
Corporation of Town of Newmarket	Newmarket	Purchased	3	25	.....	550	110/220	10	1,020
New Toronto Public Utilities Com	New Toronto	Purchased	1-3	25	.....	550	110/220	25	1,311
Hydro Electric Commission	Neustadt	Water	1-3	60	4,000	110/220/550	110/220	4	107
Canadian Explosives Limited	Nobel	.....	1-3	60	600	550	110/120	2	37
Orangeville Hydro Com	Orangeville	Purchased	1-2-3	60	22,000	220/550	110/220	11	597
Orillia Water, Lt. & Pr. Com	Orillia	Water	1-3	60	2,200	220/440/550/2,200	110	25	951
Owen Sound Public Utilities Com	Owen Sound	Water	1-3	60	2,200	550	110/220	110	3,387
Parry Sound Public Utilities Com	Parry Sound	Water	1-3	60	2,300	2,300	110/220	16	785
The Penetanguishene Water & Lt. Com	Penetanguishene	Water	1-3	60	2,200	220/550/2200	110/220	29	620
Corporation of Port Credit	Port Credit	Purchased	3	25	13,000	4,400	110/220	5	488
Port McNicoll Hydro Elec. Com	Port McNicoll	Purchased	3	60	2,200	.....	110	.....	191
Grant A. Assun	Priceville	Purchased	.....	.....	220	.....	110	.....	33
Corp. of Village of Richmond Hill	Richmond Hill	Purchased	1-3	25	2,200	550	220/110	12	347
Rockwood Hydro Electric	Rockwood	Purchased	1-3	25	13,000	550	110/220	.....	150
The Rosseau Electric System	Rosseau	Gasoline	D.C.	.....	125	.....	110	.....	19
Shelburne Hydro Commission	Shelburne	Purchased	1-3	60	22,000	220/550	110/220	12	373
South River Electric Co	South River	Water	1-3	60	4,000	550	110	.....	
Stayner Hydro Elec. Com	Stayner	Purchased	1-3	60	4,600	220	220/110	8	260
Corporation of Village of Stouffville	Stouffville	Purchased	1-2-3	25	4,000	550	110	4	328
Village of Streetsville	Streetsville	Gas	3	60	2,300	220	110	3	182
Sutton Hydro Elec. Pr. System	Sutton West	Purchased	1-3	25	.....	550	2,200/4,000	3	395
Alfred J. Lowe	Thornbury	Purchased	1-3	60	2,200	220	110	.....	222
Police Village of Thornton	Thornton	.....	1-3	60	26,400	4,000	110	.....	56
Childs Company	Toronto	Purchased	D.C.	.....	115/230	.....	115/230	.....	68
Toronto Electric Commissioners	Toronto	Purchased	1-3	25 & 62½	13,200	2,300/550 115/230	115/230	4,941	154,239
Canadian National Ex. Assoc	Toronto	Purchased	1-3	25	.....	550/220	110/220	7	40
Hydro Electric Power Com. Systems—Niagara	Toronto—	Water	3	25	12,000	110,000/60,000/	.....	392	145

						46,000/ 30,000/ 26,400/ 13,200/ 12,000/ 4,000/2,300/ 500			
Central Ontario		Water	3	60	6,600/2,300	44,000/ 11,000 4,160/2,400		58	13
Georgian Bay		Water	3	60	2,300/4,000/ 6,600	38,000/ 22,000 4,000/2,300		79	30
Nipissing		Water	3	60	2,300	22,000/2,300		5	
Monarch Supply Co., Ltd	Toronto	Steam	D.C.			110/220	110/220	10	34
Twp. of East York Hydro Elec. Systems	Toronto	Purchased	1-3	25	13,000	4,400/550	110/220	26	6,629
Canadian National Electric Rys	Toronto	Purchased	1-3	25	13,600	400	110	1	1
Barrie R.P.D	Toronto	Toronto					110/220		70
Beaumaris R.P.D	Toronto								
Beeton R.P.D	Toronto		1	60		220	110		1
Bond Lake R.P.D	Toronto		1-3	25	4,000/2,300	550/220	220/110	23	700
Brampton R.P.D	Toronto		1	25			110/220		100
Buckskin R.P.D	Toronto								
Chatsworth R.P.D	Toronto		1	60		220	110		
Elmvale R.P.D	Toronto		1	60		220	110/220	1	21
Elora R.P.D	Toronto		1-3	25	4,000	550	110/220	1	98
Flesherton R.P.D	Toronto		1	60		220	110		28
Georgina R.P.D	Toronto		1	60			110/220		69
Gravenhurst R.P.D	Toronto			60			110/220		2
Guelph R.P.D	Toronto		1-3	25			110/220	1	83
Hornings Mills	Toronto		1	60		220	110		28
Innisfil R.P.D	Toronto		1	60		220	110		
Keswick R.P.D	Toronto		1-3	25	4,000/2,300	550/220	220/110	1	560
Markdale R.P.D	Toronto		1	60		220	110	2	
Markham R.P.D	Toronto		1-3	25	4,000/2,300	550/220	220/110	6	330
Neustadt R.P.D	Toronto		1	60		110/220	110/220		1
Newmarket R.P.D	Toronto		1-3	25	4,000/2,300	550/220	220/110	5	146
Nottawasaga R.P.D	Toronto		1-3	60		110/220	110/220		81
Orangeville R.P.D	Toronto		1	60		220	110		17
Scarboro R.P.D	Toronto		1-3	25	4,000/2,300	550/220	220/110	3	196
Shelburne R.P.D	Toronto		1	60		220	110		9
Sparrow Lake R.P.D	Toronto		1	60			110/220		105
Stayner R.P.D	Toronto		1-3	60		110/220	110/220		299
Streetsville R.P.D	Toronto		1	25			110/220		204
Tara R.P.D	Toronto		1	60		110/220	110/220		28
Woodbridge R.P.D	Toronto		1	25		220/550	110/220	8	575
Newall Clendenan	Thornbury		1-3	60	2,200	220/110	110		83
Corporation of Village of Tottenham	Tottenham	Purchased		60	26,400	110/220	110/220	6	160
The Light & Power Committee	Victoria Harbour	Water	1	60	22,000		110		177

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Toronto—Concluded									
Waubaushene Hydro Electric Com.	Waubaushene	Water		60	2,200	220	110	7	134
Weston Water Power and Light Com.	Weston	Purchased	1-3	25		550	220/110	26	1,500
North York Hydro Electric Com.	Willowdale	Purchased	3	25	4,000/2,300	550	220/110	21	1,628
Woodbridge Hydro Electric Com.	Woodbridge	Purchased	3	25	13,200/4,000	550	110/220	7	242
Total number of meters in District of Toronto								6,517	215,754
Hamilton—									
Acton Public Utilities Company	Acton	Purchased	3	25	2,300	550/220	110/220	18	522
Twp. of Ancaster Hydro Electric System	Ancaster	Purchased					110/220	4	604
Ayr Hydro Electric System	Ayr	Purchased	1-3	25		550	220/110	1	239
The Police Village of Baden	Baden	Purchased	1-3	25	13,000	4,400/550	110	4	139
Hamilton Cataract Pr., Lt. & Tr. Co., Ltd.	Beamsville	Water	1-3	66⅔	2,400	220	110	6	447
Western Counties Electric Co., Ltd.	Brantford	Water	1-3	66⅔	2,400	220	110	140	1,523
Brantford Hydro Electric System	Brantford	Purchased	1-3	25	26,000	4,000/550 220	220/110	99	6,627
Twp. Brantford Hydro Electric System	Brantford	Purchased	1-3	25	2,200	550	110/220	4	650
Bronte Light and Power Company	Bronte	Purchased	3	66⅔	2,200	220	110	1	296
Burford Hydro Electric System	Burford	Purchased	1-3	25	2,200	550/220	110	4	216
Hamilton Cataract Pr., Lt. & Tr. Co., Ltd.	Burlington	Water	1-2-3	66⅔	2,400	220	110	22	2,074
Caledonia Hydro Electric System	Caledonia		3	25	2,200	550/110		10	282
Police Village of Campbellville	Campbellville	Purchased	1	25	2,300		110		42
Cayuga Hydro Electric System	Cayuga	Purchased	1-3	25	4,000	550	110/220	4	115
Chippawa Hydro Electric System	Chippawa	Purchased	1-3	25	12,000	2,200	220/110	1	308
The Delhi Light and Power Co.	Delhi	Water	1-3	60	2,300	220	110	18	187
Public Utilities Commission	Dundas	Purchased	1-3	25		550	110	45	1,200
The Dundas Electric Co., Ltd.	Dundas	Water	1-3	66⅔	2,400	220	110	4	68
Public Utilities Commission	Dunnville	Purchased	1-3	25	46,000	110/220/550	110/220	24	668
Elmira Public Utilities Commission	Elmira	Purchased	1-3	25	4,000	550	110/220	17	603
Fonthill Hydro Commission	Fonthill	Purchased	2-3	25	4,000	220	110	2	240
Public Utilities Commission of Galt	Galt	Purchased	1-3	25	13,200	550	110	122	3,780
Hydro Electric Department	Georgetown	Purchased		25	4,000	220/550	110/220	26	710
Hamilton Cataract Pr., Lt. & Tr. Co. Ltd.	Grimsby	Water	1-3	66⅔	2,400	220	110	28	801
Hagersville Hydro System	Hagersville	Hydro	1-3	25		4,000/550	110	12	359

Hamilton Cataract Pr., Lt. & Tr. Co. Ltd.	Hamilton	Water	1-2-3	66⅔	2,400	220	110	456	60
Hamilton Electric Lt. & Pr. Co. Ltd	Hamilton	Water	1-3	66⅔	2,400	.....	110	.....	5,480
Hamilton Hydro Electric System	Hamilton	Purchased	1-3	25	13,200	220/550	110/220	768	30,565
Hespeler Hydro Electric Com	Hespeler	Purchased	1-3	25	13,200	2,200/13,200 110/220/550	110	6	856
Humberstone Hydro System	Humberstone	Purchased	3	25	12,000	4,000/220	110/220	8	443
Jarvis Hydro Electric System	Jarvis	Hydro	1-3	25	4,000	550	110/220	4	110
Kitchener Public Utilities Com	Kitchener	Purchased	1-3	25	132,000	2,200/550	110/220	233	6,680
Lynden Hydro Electric System	Lynden	Purchased	.....	25	136,000	220	110	1	93
Merritton Hydro Electric System	Merritton	Purchased	3	25	12,000	2,200/550	220/110	4	690
Milton Hydro Electric Commission	Milton	Purchased	1-3	25	13,200	2,200/550	4,400	23	535
Barton Hydro Commission	Mt. Hamilton	Purchased	1-3	25	2,200	220/550	110/220	4	1,207
New Hamburg Hydro Electric System	New Hamburg	Purchased	1-3	25	2,200	550/220	110/220	14	471
Canadian Niagara Power Co., Ltd	Niagara Falls	Water	1-3	25	11,000	220/2,200/ 4,450/11,000/ 40,000	110	60	3,326
Hydro Elec. Pr. Com. of Niagara Falls	Niagara Falls	Purchased	1-3	25	12,000	550/440/220	110/220	83	4,741
Stamford Hydro Electric System	Niagara Falls	Purchased	1-3	25	.....	550/220/440	110/220	10	1,275
Niagara Hydro Electric Commission	Niagara-on-the-Lake	Purchased	1-3	25	2,200	220/2,200	110	8	474
Oakville Water and Light Com	Oakville	Purchased	1-3	60	.....	2,200	110/220	29	1,054
The Trafalgar Public Utilities	Oakville	Steam & water	1-3	60	40,000	2,200	110/220	10	221
Paris Hydro Electric and Water Com	Paris	Purchased	3	25	2,200	550	110/220	20	1,218
Preston Light and Water Company	Preston	Purchased	1-3	25	13,200	550	110/220	51	1,686
Port Dalhousie Public Utilities Com	Port Dalhousie	Purchased	1-3	25	.....	220/550	110/220	11	588
Port Dover Hydro Electric System	Port Dover	Purchased	1-3	25	26,000	220/550	110/220	11	415
Port Colborne Hydro Electric Com	Port Colborne	Purchased	1-3	25	.....	220	110	17	1,300
Port Rowan Hydro System	Port Rowan	Purchased	.....	25	.....	.....	110	.....	81
Queenston Hydro Electric System	Queenston	Purchased	1	25	4,000	110/220	110/220	1	67
Lincoln Electric Light & Power Co., Ltd	St. Catharines	Water	1-3	66⅔	2,400	220	110	99	1,217
Public Utilities Com. of City of St. Catharines	St. Catharines	Purchased	1-3	25	.....	2,200/550/ 220	112	125	5,930
The St. George Hydro Electric System	St. George	Purchased	1-3	25	4,000	550	110/220	4	146
St. Jacob's Hydro Electric System	St. Jacobs	Purchased	1-3	25	4,000	550	110/220	6	128
Simcoe Hydro Electric System	Simcoe	Purchased	1-3	25	.....	550/220	220/110	32	936
Corporation of Village of Smithville	Smithville	Purchased	3	60	2,200	2,200	110/220	7	205
Public Utilities Commission	Thorold	Water	1-3	25	2,200	220/550	110/220	11	1,367
Hydro Electric Power Company (serving)	Toronto	.....	.....	.....	.....	.....	.....	.....	.....
	Acton R.P.D	Purchased	1	25	.....	.....	110/220	.....	4
	Ayr R.P.D	Purchased	1-3	25	.....	.....	.....	.....	32
	Baden R.P.D	Purchased	1-3	25	4,000	220/550	110/220	2	215
	Beamsville R.P.D	Water	1-3	25	12,000	4,400/2,200	110/220	17	531
	Brant R.P.D	.....	.....	.....	.....	.....	.....	.....	230
	Burford R.P.D	.....	.....	.....	.....	.....	.....	2	85
	Caledonia R.P.D.	Purchased	1-3	25	2,200	220	110/220	1	133
	Chippawa R.P.D.	Water	1-3	25	12,000	220	110	3	90
	Dundas R.P.D	Water	1-3	25	12,000	220/550	110/220	6	385
	Elmira R.P.D	Purchased	1-3	25	4,000	220/550	110/220	.....	31
	Galt R.P.D	Purchased	1-3	25	4,000	220/550	110/220	.....	190

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meter	
						Power	Lighting	Power	Lighting
Hamilton—Concluded									
Hydro Electric Power Company (serving) —*Concluded*	Georgetown R.P.D.	Purchased	1-3	25	.....	220	110/220	.....	121
	Grantham R.P.O.	Purchased	1	25	.....	110/220	110	3	415
	Haldimand R.P.D.	Purchased	1	25	.....	.....	110/220	.....	60
	Jordan R.P.D.	Purchased	1	25	.....	110/220	110	.....	148
	Lynden R.P.D.	Water	1-3	25	12,000	220	110/220	1	155
	Milton R.P.D.	Purchased	1-3	25	.....	220	110/220	1	170
	Niagara R.P.D.	Water	1-3	25	12,000	220	110	6	173
	Preston R.P.D.	Purchased	1-3	25	4,000	220/550	110/220	3	550
	St. Jacobs R.P.D.	Purchased	1-3	25	4,000	220/550	110/220	4	200
	Saltfleet R.P.D.	Purchased	1-3	25	4,000	220	110/220	2	757
	Simcoe R.P.D.	Purchased	1-3	25	.....	220	110/220	2	126
	Stamford R.P.D.	Water	1-3	25	12,000	.....	110	.....	213
	Waterdown R.P.D.	Water	1-3	25	12,000	220/550	110/220	9	195
	Waterford R.P.D.	Purchased	1-3	25	.....	220	110/220	1	60
	Walsingham R.P.D.	Purchased	1	25	.....	.....	110/220	.....	62
	Welland R.P.D.	Purchased	1-2-3	25	.....	220/550	110/220	17	1,478
Waterdown Hydro Electric System	Waterdown	Purchased	3	25	.....	110/220/550	110/220	7	227
Waterford Hydro Commission	Waterford	Water	3	25	4,000	220/550	110/220	13	345
Public Utilities Commission	Waterloo	Purchased	1-3	25	.....	2,200/550	110/220	67	1,814
Hamilton Cataract Pr., Lt. & Tr. Co., Ltd.	Welland	Water	1-3	66⅔	2,400	575/220	110/220	8	.....
Welland Hydro Electric System	Welland	Purchased	1-3	.....	46,000	110/220/550/2,200	110/220	78	2,523
Wellesley Light and Power Company	Wellesley	Purchased	1-3	25	.....	550	110/220	4	141
Total number of meters in District of Hamilton								2,989	108,123
London—									
Hydro Electric Commission	Ailsa Craig	Purchased	1-3	25	4,000	550	110	3	156
Alvinston Hydro-Electric System	Alvinston	Purchased	3	25	.....	550	110	4	208
Amherstburg Hydro-Electric Sysytem	Amherstburg	Purchased	1-3	25	.....	550/220/110	550	14	745

The Hydro-Electric Commission	Arkona	Water	1-3	25	4,000				
Aylmer Public Utilities Commission	Aylmer	Purchased	1-3	25		210	110	12	600
Beachville Hydro-Electric System	Beachville	Purchased	1-3	25		4,400	120	3	102
Belle River Hydro-Electric System	Belle River	Purchased	1-3	25		550	110/220	4	191
Blenheim Hydro-Electric System	Blenheim	Purchased	1-3	25	2,600	2,200/ 550/220	110/220	14	565
Blyth Public Utilities Commission	Blyth	Purchased	1-3	25	4,000	550/220	110/220	4	173
Bothwell Hydro System	Bothwell	Purchased	1-3	25		26,000/500	110	5	206
Brigden Hydro-Electric System	Brigden	Purchased	3	25		550	110	4	100
Brussels Hydro-Electric System	Brussels	Purchased	2-3	25		550	110/220	1	230
The Burgessville Hydro-Electric System	Burgessville	Purchased	1-3	25		550	110/220	1	75
Cargill Limited	Cargill	Water			120	240	110		
Chatham Public Utilities Commission	Chatham	Purchased	1-3	25	2,300	550/220	110	116	4,400
Chesley Public Utilities Commission	Chesley	Purchased	1-3	60	22,000	550/110	110	18	473
Clinton Public Utilities Commission	Clinton	Purchased	1-3	25	26,400	550	110/220	6	675
Comber Hydro-Electric Commission	Comber	Purchased	1-3	25		550	110	3	137
Cottam Hydro-Electric Commission	Cottam	Purchased	1-3	25	2,300	220	110	2	110
Courtright Hydro-Electric System	Courtright	Purchased	1-3	25	2,000		100		85
Dashwood Hydro-Electric System	Dashwood	Purchased	1-3	25	4,400	110/220/550	110/220	1	84
Delaware Police Village	Delaware	Purchased	1	25	2,200	110/220	110		60
Dorchester Police Village	Dorchester	Purchased	1-3	25		220	110	2	153
Hydro-Electric System	Dresden	Purchased	1-3	25		110/220/550	110	14	459
Drumbo Hydro-Electric System	Drumbo	Purchased	2-3	25	2,200	550/220	110/220	2	93
Public Utilities Commission	Dublin	Purchased	1-3	25		550	110	5	57
Dutton Hydro System	Dutton	Purchased	1-3	25	2,200	550	110/220	7	268
Elmwood Hydro-Electric System	Elmwood		3	60		220	110	1	68
Embro Hydro-Electric System	Embro	Purchased	1-3	25	13,000	2,200	110	3	130
Erieau Hydro-Electric System	Erieau	Purchased	1	25	2,200		110/220		113
Essex Hydro-Electric System	Essex	Purchased	1-3	25		550/220	110	18	515
Public Utilities Commission	Exeter	Purchased	1-3	25	13,200/4,40	0110/220/550	110/220	11	553
W. Thomas	Florence	Oil		60	110		110		
Electric Light Commission	Fordville		1	60	2,200		110		31
Forest Public Utilities Commission	Forest	Purchased	3	25	26,400	550	220/110	22	555
Formosa Electric Light Co., Ltd	Formosa	Purchased	2-3	60	2,250	220	110	1	46
Glencoe Hydro-Electric Commission	Glencoe	Purchased	2-3	25		550	110	5	294
Water and Light Commission	Goderich	Purchased	1-3	25	110,000	550	110/220	17	1,260
Village of Granton	Granton	Purchased	3	25		550	110/220	1	106
Harrow Hydro-Electric Power Com	Harrow	Purchased	1-3	25	4,000	220	110/220	6	235
Hensall Hydro-Electric System	Hensall	Purchased	1-3	25		550	110/220	10	185
Highgate Hydro-Electric System	Highgate	Purchased	1	25		110/220	110/220	6	127
Ingersoll Public Utilities Commission	Ingersoll	Purchased	1-3	25	13,200/2,200	220/550/200	110/220	45	1,527
The Electric Light and Water Com	Kincardine	Purchased	1-3	60	22,000	220/550	110/220	19	541
Kingsville Hydro-Electric	Kingsville	Purchased	1-3	25	2,300	220	110	19	794
Police Village of Lambeth	Lambeth	Purchased	1-3	25		550	220/110	1	120
La Salle Hydro-Electric System	LaSalle	Purchased	1	25	4,000	2,200	110/220		103
Leamington Hydro-Electric Commission	Leamington	Purchased	1-3	25		220	110	22	1,406
Public Utilities Commission	Listowel	Purchased	1-3	25		550	110/220	21	790
Public Utilities Commission	London	Purchased	1-3	25	13,200	550	2,300/4,000 110/220	511	18,689
Cities Heating Company, Ltd	London	Purchased			125/500	500	110	1	8
London Township Voted Area	London	Purchased	3	25		220	110/220	2	272

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
London—Continued									
Lucan Hydro-Electric Commission	Lucan	Purchased	1-3	25		550	110	10	202
Lucknow Hydro-Electric System	Lucknow	Purchased	1-3	60		550	110/220	4	296
Merlin Hydro System	Merlin	Purchased	1-3	25		550	110	4	139
Mildmay Electric Light Co., Ltd	Mildmay	Purchased	3	60	2,200	2,200	110/220	2	158
Milverton Hydro-Electric Power Com	Milverton	Purchased	1-3	25	4,000	550	110/220	6	264
Public Utilities Commission	Mitchell	Purchased	1-3	25		550	110	24	546
Mt. Brydges Hydro System	Mt. Brydges	Purchased	1-3	25		550	110	3	140
Village of Newbury	Newbury	Purchased	3	25	4,000	550	110/220	1	77
Norwich Public Utilities Commission	Norwich	Purchased	1-3	25		550/220	110/220	8	435
Oil Springs Hydro-Electric System	Oil Springs	Purchased	3	25	2,200	550	110/220	37	98
Otterville Hydro-Electric	Otterville	Purchased	1	25	4,000	500	110	5	138
Palmerton Public Utilities	Palmerston	Purchased	1-3	25	4,000	550	110/220	8	462
Paisley Hydro Commission	Paisley	Purchased	1	60		100	100	3	207
Park Hill Hydro-Electric System	Park Hill	Purchased	3	25		550	220	5	275
Petrolia Hydro-Electric System	Petrolia	Purchased	1-3	25	26,000	220/550	110/220	67	803
Village of Plattsville	Plattsville	Purchased	1-3	25		550	110/220	2	100
Port Stanley Hydro-Electric and Water Department	Port Stanley	Purchased	1-3	25	2,200	220	110/220	8	386
Princeton Hydro Commission	Princeton	Purchased	1-3	25		550	110/220	1	87
Public Utilities Commission	Ridgetown	Purchased	1-3	25		550	110/220	20	625
Ripley Hydro-Electric System	Ripley	Purchased	2-3	60	4,400	550	110/220		124
The Village of Rodney	Rodney	Purchased	1-3	25	2,200	550	110/220	4	268
Public Utilities Com. of St. Mary's	St. Marys	Purchased	1-3	25	2,300	550/220	220/110	36	1,175
Hydro-Electric Com. of St. Thomas	St. Thomas	Purchased	1-3	25		550	220/110	72	5,113
Sandwich Hydro-Electric System	Sandwich	Purchased	1-3	25	26,400	220/550	110/220	27	2,754
Sarnia Hydro-Electric System	Sarnia	Purchased	1-3	25		2,200/550 440/220	115	76	4,874
Point Edward Hydro-Electric System	Sarnia	Purchased	1-3	25		2,200/550 440/220	115	14	320
Public Utility Commission	Seaforth	Purchased	1-3	25	2,200	550/220	110	13	601
Saugeen Electric Light and Power Co	Southampton	Water	1-3	60	6,600/2,300	220/440/550	110/220	17	604
The Hydro Commission	Springfield	Purchased	1-3	25	33,000	550	110	4	114
Public Utility Commission	Stratford	Purchased	3	25	4,000	550	220/110	137	4,745
Public Utility Commission	Strathroy	Purchased	1-3	25	13,200	550	220/110	23	884
Tara Hydro Electric Commission	Tara	Purchased	1-3	60	4,400	220	110	3	147

Public Utility Commission	Tavistock	Purchased	1-3	25	26,400	575	110/220	5	235
W. H. Logan	Teeswater	Purchased	1	60	22,000	2,200	220	3	250
Thamesford Hydro-Electric System	Thamesford	Purchased	1-3	25	2,200/4,400	110/220/550	110	6	137
Public Utilities Commission	Thamesville	Purchased	1-3	25		550	110/220	7	280
Hydro-Electric Commission	Thedford	Purchased	1-3	25	4,400	550	220/110	2	161
Thorndale Hydro Electric	Thorndale	Purchased	3	25	4,000	220/550	110/220	1	91
Tilbury Hydro Power Commission	Tilbury	Purchased	1-3	25	26,000	220/550	110	12	430
Tillsonburg Hydro-Electric Commission	Tillsonburg	Purchased	1-3	25	13,200	2,200/ 550/220	220/110	27	990
Hydro-Electric Power Com. of Ontario (serving)	Toronto								
	Amherstburg R.P.D.		1-3	25		220	220	1	344
	Aylmer R.P.D.		1-2-3	25	4,000/8,000		110/220		351
	Belle River R.P.D.		3	25		110/220	110/220	3	204
	Blenheim R.P.D.		1-3	25		2,200/220	110/220	1	141
	Bothwell R.P.D.								
	Brigden R.P.D.		1	25	2,200	110/220	110/220		35
	Chatham R.P.D.		1-3	25		220	110/220	2	395
	Delaware R.P.D.		1-3	25		550/220	110	2	421
	Dorchester R.P.D.		1-3	25		220	110	1	453
	Drumbo R.P.D.		1-3	25		220	110/220		132
	Dutton R.P.D.		1	25	4,000		110/220		33
	Essex R.P.D.		3	25		110/220	110/220	1	235
	Exeter R.P.D.		1-3	25		220	110	2	356
	Forest R.P.D.		1	25	2,200	110/220	110/220		11
	Goderich R.P.D.		1-3	25	2,200	220/550	110/220	1	31
	Harrow R.P.D.		1-3	25		220	110/220		259
	Ingersoll R.P.D.		1	25	2,200/4,000		110/220		72
	Kingsville R.P.D.		1-3	25		110/220	110/220	4	805
	Listowel R.P.D.		1-3	25	4,000	220/550	110/220		127
	London R.P.D.		3	25		220	110/220	6	1,322
	Lucan R.P.D.		3	25		220	110/220		62
	Lucknow R.P.D.		1-3	60		110/220	110/220	1	1
	Milverton R.P.D.		1-3	25	4,000	220/550	110/220		65
	Mitchell R.P.D.		1-3	25	4,000	220/550	110/220	3	140
	Norwich R.P.D.		1-2-3	25	4,000	550	110/220	4	347
	Oil Springs R.P.D.		1	25	2,200	220	110/220	1	74
	Palmerston R.P.D.		1-3	25	4,000	220/550	110/220		9
	Petrolia R.P.D.		1	25	2,200	110/220	110/220		7
	Ridgetown R.P.D.		1-3	25	4,000		110/220		397
	Ripley R.P.D.		1-3	60		110/220	110/220	1	2
	St. Mary's R.P.D.		1-3	25	4,000	220/550	110/220	1	34
	St. Thomas R.P.D.		1-2-3	25	4,000	550	110/220	1	661
	Sandwich R.P.D.	Water	1-3	25		4,000	220/110	2	1,446
	Sarnia R.P.D.		1-3	25	2,200/4,000	220	110/220	2	748
	Seaford R.P.D.		1-3	25	2,200	220/550	110/220	2	111

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
London—Concluded									
Hydro-Electric Power Com. of Ontario (serving)—*Concluded*	Strathroy R.P.D.		1	25			110		43
	Stratford R.P.D.		1-3	25	4,000	220/550	110/220	3	145
	Tavistock R.P.D.		1-3	25	4,000	220/550	110/220		130
	Thamesville R.P.D		1	25	4,000		110/220		90
	Tilbury R.P.D		1-3	25		110/220	110/220		87
	Tillsonburg R.P.D		1-2-3	25	4,000		110/220		441
	Walton R.P.D		1-3	25	4,000	220/550	110/220		86
	Wallaceburg R.P.D		1-3	25		220/550	110/220	5	318
	Walkerton R.P.D.		1-3	60		110/220	110/220		5
	Woodstock R.P.D		1-2-3	25	4,000	220/550	110/220	2	456
	Wallaceburg R.P.D		1-3	25	26,400	550/220	220/110	28	1,110
The Walkerton Elec. Lt. & Pr. Co., Ltd	Walkerton	Water	1-3	60	2,300	220/550	110/220	22	581
Walkerville Hydro Elec. System	Walkerville	Purchased	1-3	25		220/550/4400	110/220	137	6,880
The Village of Wardsville	Wardsville	Purchased	2-3	25		220/550	110/220		64
Public Utilities Commission	Watford	Purchased	1-3	25		220/550	110/220	5	337
Hydro Electric of Village of West Lorne	West Lorne	Purchased	1-3	25	2,200	110/220	110	6	229
Wheatley-Hydro Electric System	Wheatley	Purchased	1-3	25	2,200	550	110/220	2	223
Sauble Falls Lt. & Power Co	Wiarton	Water	1-3	60	6,600	550/220	110/220	8	400
Windsor Hydro Elec. System	Windsor	Purchased	1-3	25	26,400	550/220	110/220	364	15,704
Wingham Utilities Commission	Wingham	Purchased	1-3	60		550	110/220	24	676
Woodstock Public Utilities Com	Woodstock	Purchased	1-3	25		2200/550/220	110/220	62	3,060
Wroxeter Municipal Elec. Lt. Plant	Wroxeter	Water	1	125	1,100		104		71
Wyoming Hydro Electric System	Wyoming	Purchased	1	25		550	110/220	1	162
Zurich Hydro Elec. System	Zurich	Purchased	1-3	25	4,400	110/220/550	110/220	3	156
Total number of meters in District of London								2,409	109,991

Sudbury—									
Municipal Corporation of Twp. of Calvert	Ansonville	Purchased	3	60	2,200	550	110	3	504
Municipal Service Corporation, Limited	Amos	Oil			2,300	550/110	110		225
Fred Diagle	Blind River	Water	1-2-3	60	2,400	110/220	110/220		275
F. W. McKee	Cache Bay	Water	1	60	2,200	220	110		115
Hydro Elec. Power Com. of Ontario	Callander	Water	1-3	60	2,200	110/220	110/220	2	170
Elec. Lt. Dept. Municipality of Capreol	Capreol	Purchased	1	60	35,000	220	110/220		348
Chapleau Elec. Lt. & Power Co.	Chapleau	Water and Steam	1-3	60	2,300	2300/550/220	110	7	457
Northern Ontario Lt. & Pr. Co., Ltd	Cobalt	Water	1-3	60	2,400/11,000	110/220	110	81	1,632
Public Utilities Com	Cochrane	Purchased	1-3	60	110,000	220	110	83	718
The Lorne Power Company, Ltd	Coniston	Water	3	60	2,200	44,000			
The Huronian Company, Ltd	Copper Cliff	Water	1-3	25 & 60	2,400	2,200/550 33,000	110	16	568
Elk Lake Power Company	Elk Lake	Water	1-3	60	550	550/110	110		23
Northern Ontario Lt. & Pr. Co., Ltd	Englehart	Water	1-3	60	2,400/11,000	110/220	110	17	320
The Spanish River Pulp & Paper Mills, Ltd	Espanola	Water	1-3	60	2,300	2,300/550	110/220	2	495
Northern Onta io Lt. & P . Co., Ltd	Haileybury	Water	1-3	60	2,400/11,000	110/220	110/220	155	638
The Stone Lumber Co., Ltd	Hilton Beach		2	125	2,280	110	110		
Canadian National Railways	Hornepayne	Steam	1-3	60	550	550	110/220		77
George & Riching	Gore Bay	Oil			110	110	110		7
Abitibi Power & Paper Co., Ltd	Iroquois Falls	Water	3	60	13,200	600/550	110/220	6	301
Gatineau Power Company	Kipawa	Water	3	60	6,600			3	
Northern Ontario Lt. & Pr. Co., Ltd	Kirkland Lake	Water	1-3	60	2,400/11,000	110/220	110	71	819
La Cie electrique La Sarre, Ltd	La Sarre		1-3	60	2,200		110		170
Public Utilities Commission	Little Current		1-3	60	2,300		220/110		160
The Mattawa Elec. Lt. & Pr. Co., Ltd	Mattawa		1-3	60	2,200	220/110	110		7
Lloyd Deagle & Co	Massey		1	60		220	110		70
Northern Academy at Monteith	Monteith	Water	1-2	60	2,200	220	230/115	2	26
Northern Ontario Lt. & Pr. Co., Ltd	New Liskeard	Water	1-3	60	2,400/11,000	110/220	110/220	121	741
Hydro Elec. Pr. Com. of Ontario	Nipissing	Water	1-3	60	2,200	110/220	110/220		16
Hydro Electric Pr. Com. of Ontario	North Bay	Water	3	60	2,200	110/220/550	110/220	64	3,264
Hydro Electric Pr. Com. of Ontario	North Bay R. D.	Water	1-3	60	2,200	110/220	110/220		114
Hydro Electric Pr. Com. of Ontario	Powassan	Water	1-3	60	2,200	110/220/550	110/220	4	169
The Quinze Power Company, Ltd	Rouyn	Water	1-3	60		550/220/110	110/220	28	609
The Great Lakes Power Company, Ltd	Sault Ste. Marie	Water	3	60/25	2,300	2,300	2,300	5	4
The Algoma District Power Co., Ltd	Sault Ste. Marie	Water	3	60		10,000	10,000	2	
Corp. of Sault Ste. Marie, Water & Light Dept	Sault Ste. Marie	Purchased	1-3	60	2,200	220	110	172	5,418
Corporation Town of Sturgeon Falls	Sturgeon Falls	Water	1-3	60	2,200	550/220	110/220	82	788
Corporation Town of Sudbury	Sudbury	Purchased	2-3	60	2,300	220	110/220	38	3,297
The Wahnapitae Power Co., Ltd	Sudbury	Water	3	60	2,300	22,500	110		
Northern Ontario Lt. & Pr. Co., Ltd	Swastika	Water	1-3	60		110/220	110	7	97
International Paper Company	Temiskaming	Purchased	2-3	60	6,600	550	110	1	
The Town of Thessalon	Thessalon	Water	1-3	60	2,200	220/110	110	3	313
Northern Canada Power Co	Timmins	Water	3	25		12,000/ 44,000	110		21
Porcupine Power & Telephone Co., Ltd	Timmins	Water	1-3	25	11,000/ 44,000/ 110,000	110/220	110/220	99	3,711
The Verner Electric Power Syndicate	Verner	Purchased	1	60	2,200	220	110		

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Sudbury—Concluded									
La Compagnie Electrique de Ville Marie Ltee	Ville-Marie	Water	1-3	60	2,400	110/220/550	110	9	112
Lloyd Deagle	Webbwood	Water	1-3	60	2,200	550	110		60
Total number of meters in District of Sudbury								1,085	26,859
Fort William—									
Canadian National Railways	Atikokan		D.C.		155		110		9
Ontario and Minnesota Power Co	Big Falls	Water	1-3	60	6,600	550	110	2	
Ontario and Minnesota Power Co	Crilly	Water	1-3	60	6,600	550	110	2	
Ontario and Minnesota Power Co	Calm Lake	Water	1-3	60	6,600	550	110	2	
The Town of Dryden	Dryden	Purchased	1-3	60	550	550	110		
Langstaff, Schurg & Company, Ltd	Emo	Steam	D.C.		110		110		30
The Town of Fort Frances	Fort Frances	Water	2-3	60	6,600	220	220/110	20	1,700
Ontario and Minnesota Power Co	Fort Frances	Water	1-3	60	6,600	550	110	7	
Twp. of McIrvine	Fort Frances	Water	2-3	60	6,600		110		21
Hydro Electric Commission	Fort William	Purchased	1-3	60		22,000/2,200 550/220	110/220	78	6,093
Kaministiquia Power Co., Ltd	Fort William	Water	3	60	3,600/4,400	22,000/25,000 2,200/2,400 550/600	210/220 110/115	23	15
Canadian Pacific Railway Co	Ignace	Steam			250	220	110	1	2
Corporation of Town of Kenora	Kenora	Purchased	1-3	60		2200/220/110	220/110	63	1,897
Keewatin Power Company	Kenora	Water	1-3	60	2,400	2,400	110/220	6	
Canadian National Railways	Nakina	Steam	1-3	60	550	550	110		
Nipigon Hydro Elec. Commission	Nipigon	Purchased	1-3	60	2,200		110/220		117
Keewatin Power Company	Norman Dam Plant	Water	1-3	60	6,600	6,600	110/220	2	
Public Utilities Commission	Port Arthur	Water	1-3	60	2,200	22,000/ 2,200/550	220/110	45	4,413
The Town of Rainy River	Rainy River	Steam	3	60	2,300		110		300
Canadian Pacific Railway Co	Schreiber	Steam	D.C.		250/125	250	125		2

Town of Sioux Lookout	Sioux Lookout	Steam	1	60	2,200		110		385
National Transcontinental Ry	Sioux Lookout	Steam	3	60	2,200	550	110		13
Dryden Paper Co., Ltd	Wainwright	Water	1–3	60	11,000	550	110		
Total number of meters in District of Fort William								251	14,997
Winnipeg—									
The Town of Beausejour	Beausjour	Purchased	1–3	60	2,200	550	110	20	184
Municipal Electric Light Plant	Boissevain	Steam	2	60	2,200		115		175
J. L. Davy	Bowsman River	Oil	D.C.		110	110	110		26
Canada Gas and Electric Corporation	Brandon	Steam	1–3	60	2,300	2,300	120	144	3,392
The Town of Carberry	Carberry	Steam	1–2	60	2,300		115		205
The Town of Dauphin	Dauphin	Steam	1–2	60	2,200	220	110	48	885
The Town of Emerson	Emerson	Purchased	1–3	60	2,200	2,200	110	6	158
D. H. Nickolishen	Ethelbert	Gasoline	D.C.		110		110		
Echo Flour Mills Co., Ltd	Gladstone	Steam	3	60	550		110	1	1
Gladstone Mun. Elec. Light and Power	Gladstone	Steam	3	60	550	550	110		135
Keenan & Thomson	Gilbert Plains				125		125		11
Wm. Bickel	Grandview	Oil	D.C.		110		110		15
A. Coblentz & Son	Gretna	Purchased	1–3	60	2,200		110		67
Jas. M. McDonald	Griswold	Oil	D.C.		110		110		
The Town of Hartney	Hartney		1–3	60	2,300	2,300	110	7	118
Killarney Mun., Light & Power Dept	Killarney	Steam	1–3	60	2,300	110	110	4	300
L. Lawlor	Kenton	Gas	D.C.		110		110		6
Citizens Electric Company	Lenore		D.C.				115		
Town of Melita	Melita	Steam	D.C.		110/120		110/120		168
S. R. Voas	Melita	Steam	D.C.		110	110	110		2
Corporation of Town of Neepawa	Neepawa	Steam	1–3	60	2,300	220/550	110/220	22	443
Manitoba Power Company	Pine Falls	Purchased	1–3	60		6,600/2,300/550	115/230	9	111
Electric Department	Portage La Prairie	Purchased	1–3	60	2,200	220/550	110	53	1,137
Town of Rapid City	Rapid City	Gasoline	3	60	2,200		110		101
Rural Municipality of Pipestone	Reston	Oil	D.C.		120		120		132
Canadian National Railways	Rivers	Steam	3	60	2,200	550	110	1	
The Incorporated Town of Rivers	Rivers	Purchased		60	2,200	220	110	1	173
Village of Roblin	Roblin	Oil	2–3	60	2,200	220	110	5	4
Corporation of Town of Russell	Russell	Oil	3	60	2,200	220	110	2	188
The Village of Shoal Lake	Shoal Lake	Oil	D.C.		125/250	250	110		140
Selkirk Electrical Department	Selkirk	Purchased	3	60	2,200	220	110	15	1,000
Town of Souris Elec., Light and Power	Souris	Gas	D.C.		240	220/110	110	13	270
P. T. Barkman Sons	Steinbach	Steam	D.C.		125	110	110	3	86
Swan Lake Power Co., Ltd	Swan Lake	Oil	3	60	2,200	220	110	3	100
Corporation of Town of The Pas	The Pas	Oil	1–3	60	2,300	220	110/220	16	504
Manitoba Power Company Ltd. (serving)	Manitoba Winnipeg								
	Central Manitoba Mines District	Purchased						1	
	Great Falls	Water	3	60	11,000	550	110	4	3
	Lac du Bonnet	Purchased							71
	Pine Falls	Purchased						1	

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Winnipeg—Concluded									
Winnipeg Electric Company (serving)	Winnipeg	Water and steam	1–3	60	2,200	2,200/550/ 12,000/22,000	110	912	9,395
	East Kildonan	Purchased						11	1,623
	Fort Garry	Purchased						10	620
	St. Boniface	Purchased						165	3,295
	St. Vital	Purchased						8	2,024
	Transcona	Purchased						6	12
	West Kildonan	Purchased						6	1,191
Winnipeg, Selkirk and Lake Winnipeg Railway Company (serving)	Winnipeg								
	Rockwood	Purchased						11	266
	Stony Mountain	Purchased						1	61
	St. Andrews	Purchased						31	120
	St. Paul	Purchased						10	110
Suburban Rapid Transit Company (serving)	Winnipeg								
	Assiniboia	Purchased							265
	Charleswood	Purchased							149
	St. James	Purchased						38	4,095
	Tuxedo	Purchased							103
Manitoba Power Commission (serving)	Winnipeg								
	Altamont	Purchased	1–3	60	2,300	2,300/220	220/110	3	20
	Cardinal	Purchased	1–3	60	2,300	2,300/220	220/110	1	5
	Carman	Purchased	1–3	60	2,300	2,300/220	220/110	30	317
	Crystal City	Purchased	1–3	60	2,300	2,300/220	220/110	4	84
	Cypress River	Purchased	1–3	60	2,300	2,300/220	220/110	2	40
	Darlingford	Purchased	1–3	60	2,300	2,300/220	220/110	3	45
	Elm Creek	Purchased	1–3	60	2,300	2,300/220	220/110	6	72
	Glenboro	Purchased	1–3	60	2,300	2,300/220	220/110		104
	High Bluff	Purchased	1–3	60	2,300	2,300/220	220/110	1	22
	Holland	Purchased	1–3	60	2,300	2,300/220	220/110	1	72
	Homewood	Purchased	1–3	60	2,300	2,300/220	220/110	1	7
	La Riviere	Purchased	1–3	66	2,300	2,300/220	220/110	1	44
	Manitou	Purchased	1–3	60	2,300	2,300/220	220/110	6	138
	Miami	Purchased	1–3	60	2,300	2,300/220	220/110	3	93
	Minnedosa	Purchased	1–3	60	2,300	2,300/220	220/110	18	394

	Morden	Purchased	1-3	60	2,300	2,300/220	220/110	30	330
	Myrtle	Purchased	1-3	60	2,300	2,300/220	220/110	2	14
	Notre Dame	Purchased	1-3	60	2,300	2,300/220	220/110	3	39
	Oakville	Purchased	1-3	60	2,300	2,300/220	220/110	8	90
	Pilot Md	Purchased	1-3	60	2,300	2,300/220	220/110	2	89
	Portage la Prairie	Purchased	1-3	60	2,300	2,300/220	220/110		
	Rathwell	Purchased	1-3	60	2,300	2,300/220	220/110		34
	Roland	Purchased	1-3	60	2,300	2,300/220	220/110	16	14
	Rosebank	Purchased	1-3	60	2,300	2,300/220	220/110	1	19
	Somerset	Purchased	1-3	60	2,300	2,300/220	220/110	1	60
	Sperling	Purchased	1-3	60	2,300	2,300/220	220/110	2	49
	Swan Lake	Purchased	1-3	60	2,300	2,300/220	220/110	2	44
	Treherne	Purchased	1-3	60	2,300	2,300/220	220/110		95
	Verdun	Purchased	1-3	60	2,300	2,300/220	220/110	20	392
City of Winnipeg Hydro Electric System (serving)	Winnipeg	Water and steam	1-3	60	66,00/12,000	550/220	115	1,171	56,332
	Beausejour	Purchased	3	60		2,400		2	
	Bird's Hill	Purchased	1-3	60		550/220	115	10	81
	Brooklands	Purchased	1-3	60		550/220	115	3	650
	East Kildonan	Purchased	1-3	60		550/220	115	4	467
	Fort Garry	Purchased	1-3	60		220	115		33
	Garson	Purchased	1-3	60		550	115	2	1
	Old Kildonan	Purchased	1-3	60		550/220	115	3	43
	Pointe du Bois	Purchased	1	60		220	115	2	38
	Rosser	Purchased	1	60			115		23
	Saldo	Purchased	1	60		550/220		1	
	Stony Mountain	Purchased	1-3	60		550/220	115	3	44
	Transcona	Purchased	1-3	60		550/220	115	18	1,638
	Tuxedo	Purchased	1-3	60		550/220	115	5	52
	West Kildonan	Purchased	1-3	60		550/220	115	3	227
Traders' Building Association Ltd	Winnipeg	Purchased	1	60		220	110	1	252
Canadian Pacific Railway Company	Winnipeg Beach	Oil	3	60	2,100	220	110	6	18
Total number of meter's in district of Winnipeg								2,989	96,383
Regina—									
Abernethy Light and Power Plant	Abernethy	Oil	D.C.		120		110		33
G. S. Wyman	Aneroid	Purchased	D.C.		125	110	110		90
Arcola Light and Power Co	Arcola	Oil	3	60	2,200		110/220		128
The Town of Assiniboia	Assiniboia	Oil	1-3	60	2,400	220	110	13	383
The Village of Avonlea	Avonlea	Oil			120		110		63
The Balcarres Power and Light Co., Ltd	Balcarres	Oil	D.C.		120	110	110		92
H. Fischman	Bateman	Kerosene	D.C.		125		110		19
The Town of Battleford	Battleford	Purchased	1-3	60	2,300	220	115	14	230
Thornton Bros	Bengough	Gasoline	D.C.		125		110		52
The Biggar Electric Limited	Biggar	Oil	1-3	60	2,300	110/220	110/220	24	470
Carrot River Valley Mills Ltd	Birch Hills	Oil	1-3	60	550/2,300		110		50
H. L. Knelsen	Bladworth	Oil	D.C.		125		110		16
Blaine Lake Light and Power Co., Ltd	Blaine Lake	Oil	D.C.		125		110		37
A. P. Weatherby	Borden	Oil	D.C.		125		110		36
Henderson Brothers	Bounty	Oil	D.C.		125		110		13

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Regina—Continued									
Bienfait Commercial Company	Bienfait	Steam	1	60	1,100	110/220	110	14	68
Briercrest Light Company, Ltd	Briercrest	Oil	D.C.		125	110	110		37
The Town of Broadview	Broadview	Oil	1-3	60	2,300	220	110	1	163
Mingle and Pearson	Bromhead	Oil	D.C.		125		110		
Electric Light and Power Co	Bruno	Oil	D.C.		115		110		73
Cabri Power and Light Co	Cabri	Oil	D.C.		125		110		81
The Town of Canora	Canora	Oil	1-3	60	2,200	220	110		192
The Town of Carlyle	Carlyle	Steam	1-3	60	2,300		110		98
Carnduff Light and Power Association	Carnduff		D.C.		125	110	110	5	103
W. E. Schwartz	Central Butte		D.C.		115		110		23
Ceylon Motor Co., Ltd	Ceylon	Oil	D.C.		125	110	110		41
W. J. Best	Codere	Oil	D.C.		125		110		28
Colonsay Electric Co	Colonsay		D.C.		125	110	110		40
G. A. Bennett	Conquest	Oil	1-3	60	125	110	110		35
Craik Electric Limited	Craik	Oil	3	60	2,300	220	110		103
The Creelman Motor and Tractor Co	Creelman	Oil	D.C.		125		110		27
Village of Cudmore	Cudmore	Oil	D.C.		125/250		125/250		50
Cupar Electric Light Plant	Cupar	Oil	D.C.		125		110		95
C. A. Barsaloux	Cut Knife	Oil	D.C.		125	110	110		60
The Town of Davidson	Davidson	Oil	1-3	60	2,200	220	110	7	161
The Delisle Electric Light Co., Ltd	Delisle	Oil	D.C.		125	110	110		47
P. Legault	Domremy	Oil	D.C.		125		110		33
L. E. Jones Co., Ltd	Densmore	Oil	D.C.		125		110		32
Drake Light Company	Drake	Oil	D.C.		110		110		24
John C. Thompson	Drinkwater	Oil	D.C.		125		110		35
Service Electrique	Duck Lake	Oil	D.C.		115		110		41
Village of Earl Grey	Earl Grey	Kerosene	D.C.		125		110		31
E. E. Kleine	Edam	Oil	D.C.		125		110		25
The Village of Elfros	Elfros		D.C.		125		110		65
The Village of Elros	Elros	Oil	D.C.		125	110	110	1	54
Englefeld Power Company	Englefeld	Oil	D.C.		125		110		14
The Town of Estevan	Estevan	Steam	3	60	2,300	220	110	43	544
Eston Machine and Auto Company	Eston	Oil	D.C.		125		110		87
Eyebrow Light Plant	Eyebrow	Oil	D.C.		125		110		80
The Town of Fleming	Fleming	Oil	D.C.		125		110		22

C. Robertshaw	Fife Lake	Gasoline	D.C.		115		110		9
Village of Fillmore	Fillmore	Oil	D.C.		120	110	110		55
H. H. Hauffman	Foam Lake	Gasoline	D.C.						43
Fort Qu'Appelle Electric Co., Ltd	Fort Qu'Appelle	Oil	1-3	60	2,300	230	115	1	66
A. W. Evans and Company	Glenavon	Gas	D.C.		125	110	110		8
The Town of Govan	Govan	Oil	D.C.		125	110	110	129	129
Gravelbourg Electric Limited	Gravelbourg	Oil	1-3	60	2,400	220	110	15	220
The Northern Light and Power Co., Ltd.	Grenfell	Gas	1-3	60	2,300		110		200
Gull Lake Electric Limited	Gull Lake	Oil	1-3	60	2,400	220	110	5	180
Jos. A. Schaeffer	Handel	Oil	D.C.		125		110		5
G. D. Morgan	Hanley	Gas	D.C.		120		110		42
Village of Hawarden	Hawarden	Oil	D.C.		125		110		33
Shaunavon Electric Company	Hazenmore	Oil	1-3	60	2,300	220	110		41
Herbert Electric Limited	Herbert	Gas	1-3	60	2,200	220	110	1	174
P. Pendlebury	Hodgeville	Kerosene	D.C.		125		110		43
Corporation of Humbolt	Humbolt	Steam	1-3	60	2,300	220	110	115	306
The Motor and Machine Co. of Imperial, Ltd	Imperial	Oil	D.C.		110	110	110		72
Ituna Electric Light and Power Co., Ltd.	Ituna	Oil	D.C.		125		110		29
The Northern Light and Power Co., Ltd.	Indian Head	Steam	1-3	60	2,300	230/115	115	10	375
The Town of Kamsack	Kamsack	Oil	1-3	60	2,300	2,300/ 550/220	110	15	387
Keeler Electric Light Co., Ltd	Keeler	Oil	D.C.		125		110		
Kelliher Electric Light Plant	Kelliher	Oil	D.C.		120		110		32
W. E. Gardner	Kennedy	Oil	D.C.		125		110		42
Grosser Electric	Kerrobert	Oil	D.C.		220/110		110		160
E. I. Birkett	Kincaid	Oil	D.C.		125		110		20
Mid West Utilities	Kindersley	Oil	1-3	60	2,200	110/220	110	3	155
Henry Mann	Kipling	Oil	D.C.		125		110		81
The Lafleche Light and Power Co., Ltd.	Lafleche	Oil	D.C.		125		110	1	130
Olson and Rude	Lake Alma	Oil	D.C.		120	120	110		
Village of Lake Lenore	Lake Lenore	Oil	D.C.		125	110	110		33
Lancer Garage	Lancer	Oil	D.C.		120		110		2
Landis Garage and Machinery	Landis	Oil	D.C.		125	110	110		23
Mrs. A. H. Schmidt	Lang	Oil	D.C.		125		110		55
Town of Langham	Langham	Gas	1-3	60	2,200		110		93
The Rex Garage Company	Langenburg	Gas	D.C.		125	110	110		12
The Town of Lanigan	Lanigan	Oil	1-3	60	2,400	110	110		61
Lashburn Electric Co	Lashburn	Oil	D.C.		125	110	110		79
Oswald Schneider	Leader	Gas	D.C.		125		110		65
Edwin R. Teece	Oil	Oil	3	60	120		110		73
The Village of Leslie	Leslie	Oil	D.C.		120		110		19
G. S. Wyman	Limerick	Oil	D.C.		125	110	110		100
Mid-West Utilities	Lloydminster	Oil	3	60	2,200	220	110	10	360
Ray Eldred	Lockwood	Oil	D.C.		120		110		15
James Arthurs	Loverna	Oil	D.C.		125		110		22
Town of Lumsden	Lumsden	Purchased	1-3	60	2,200	110	110		133
Lucky Lake Motors Limited	Lucky Lake	Oil	D.C.		120	120	120		40
Finley Brothers	Luseland	Oil	D.C.		125		115/125		73
N. A. Brown	Macklin	Oil	D.C.		120/125		110		35
Carl E. Hastings	Maidstone	Oil	D.C.		115		110		20

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Regina—Continued									
W. H. Bagot	Manor		D.C.		110/125	110/125	110/125		18
The Maple Creek Light, Power and Milling Co., Ltd	Maple Creek	Steam	3	60	2,200	220	110	2	230
H. M. Felhaver	Marquis	Oil	D.C.		125		110		12
Village of Marcelin	Marcelin	Kerosene	D.C.		125	110	110		40
Stewart Bros	Maryfield	Oil	D.C.		125		110		25
Robert Downing	Maymont	Oil	D.C.		125		110		5
Sol Cloakey	Mazenod	Gas			110	110	110		
E. E. Kolpke	Melaval	Oil	D.C.		120		110		8
Town of Melfort	Melfort	Oil	1-3	60	2,200	220	110	22	417
Town of Melville	Melville	Gas	1-3	60	2,300	220	110	25	575
Wm. Prosser	Mervin	Oil	D.C.				110		35
Arthur H. Day	Meyronne	Oil	D.C.		120		110		60
J. W. Deshaw	Milden	Oil	D.C.		125		110		35
Milestone Electric Light Works	Milestone	Oil	D.C.		125		110		101
Anton Hipfner	Montmartre	Gasoline	D.C.		125		110		23
City of Moose Jaw	Moose Jaw	Steam	1-3	60	2,300	220	110	252	5,202
The Northern Light and Power Co., Ltd	Moosomin	Gas	1-3	60	2,300	230	115	4	200
The Town of Morse	Morse	Gas	1-3	60	2,300		110		87
John Hodges and Co	Mortlach	Gas	D.C.		125		110		12
Alex. L. Thompson	Mossbank	Oil	D.C.		120		110		35
E. E. Bakrud	Neville	Oil			125		110		34
Town of Nokomis	Nokomis	Oil	D.C.		120	110	110	3	114
City of North Battleford	North Battleford		1-3	60	2,300	220	110/220	75	975
The Norquay Electric	Norquay	Oil	D.C.		125		110		30
Montana-Dakota Power Co	North Portal		1-3	60	2,300	220	115	1	44
Village of North Regina	North Regina	Purchased	1-3	60	2,300		110		95
J. C. Fish	Ogema	Oil	D.C.		125		110		71
The Town of Outlook	Outlook	Gas	1-3	60	2,200	110	110	1	190
Municipality of Town of Oxbow	Oxbow	Oil	1	60	2,300		110	1	124
Nick Oberle	Pangman	Oil	D.C.		125		110		24
Pelly Electric Light and Power Co., Ltd	Pelly	Oil	D.C.		115	110	110		47
Frank Dalton	Pense	Oil	D.C.		125		110		41
Shaunavon Electric Company	Ponteix	Oil	D.C.		125		110		38
S. Pace	Perdue	Oil	D.C.		125		110		75

John Sept, Jr.	Prelate	Oil	D.C.		125		110		30
Corporation City of Prince Albert	Prince Albert	Steam	1-3	60	2,300	2,200/550/220/110	220/110	83	1,726
Punnichy Electric Light Co.	Punnichy	Oil	D.C.		125		110		44
The Town of Radisson	Radisson	Oil			125	110	110		96
The Town of Radville	Radville	Oil	3	60	2,300		110		205
J. C. Hoffman	Ratcliffe	Oil	D.C.		125		110		8
Rice Bros. Elec. Light Co.	Raymore	Oil	D.C.		120		110		40
H. G. Llewellyn	Readlyn	Oil	D.C.		34		32		9
Redvers Machine Works	Redvers	Oil	D.C.		120	110	110		15
Montreal Engineering Co. (serving)	Regina—								
	Balgonie	Purchased	1-3	60	13,000	110/220	110	1	59
	Pilot Butte	Purchased	1-3	60	2,300	110/220	110		
	Qu'Appelle	Purchased	1-3	60	13,000	110/220	110		115
	McLean	Purchased	1-3	60	13,000	110/220	110		12
Estate of J. S. Donahue	Regina	Purchased	1-3	60	2,300/4,000	220	110	1	50
Light and Power Dept.	Regina	Steam	1-3	60	2,300/4,000	110/220 2,300/4,000	110/220	548	11,289
McCallum Hill Bldg. Co., Ltd.	Regina	Purchased	D.C.		220/110	220	110		60
The Saskatchewan Co-operative Creameries, Ltd.	Regina	Purchased	1-3	60	2,200	220	110	1	3
J. M. W. Gallagher	Regina	Purchased	1-3	60	2,300		110		7
Riverhurst Power & Light Co.	Riverhurst	Oil	D.C.		125	110	110		45
The Town of Rosthern	Rosthern	Oil	3	60	2,300	220	110	2	235
Mid-West Utilities	Rosetown	Oil	1-3	60	2,200	110/220	110	1	295
The Town of Rouleau	Rouleau	Gas	1-3	60	2,300	220	110		170
Elmer Moulton	St. Boswells	Gasoline	D.C.		125		110		24
City of Saskatoon	Saskatoon	Steam	1-2	60	2,300	220/110	110	1,548	8,812
The Town of Scott	Scott	Oil	1-3	60	2,200	220	110		45
The Citizens Elec. Lt. Company, Ltd.	Semans	Oil	D.C.		120	110	110		91
Shaunavon Electric, Ltd.	Shaunavon	Steam	1-3	60	2,200	220	110	15	406
Wm. M. Finley	Sheho	Oil			125		110		6
The Town of Sintaluta	Sintaluta	Oil	D.C.		125		110		65
J. E. C Bourk	Springwater	Oil	D.C.		125		110		15
Star City Light & Power Co.	Star City	Oil	3	60	2,200		110		104
C. H. Hallick	Stenen	Oil	D.C.		125		110		22
The Town of Strasbourg	Strasbourg	Gas	1-3	60	2,200	110	110		144
Summerberry Supply Co.	Summerberry	Oil	D.C.		125		110		13
The Sutherland Elec. Co., Ltd.	Sutherland	Purchased	1-2	60	2,300		110		192
City of Swift Current	Swift Current	Oil and Gas	3	60	4,200	4,200/220	110	163	1,132
Carrot River Valley Mills, Ltd.	Tisdale	Steam	1-3	60	2,300		110		200
H. H. Lee	Togo	Oil			120		110		23
T. R. Waddington	Tompkins	Oil	D.C.		115		110		60
J. Douglas	Torquay	Gas	D.C.		125		110		8
Truax Garage	Truax	Oil	D.C.		110		110		4
Geo. A. Turner	Tugaske	Oil	D.C.		120		110		34
A. L. Tuck	Turtleford	Oil	D.C.		125	110	110		30
John B. Calver	Tuxford	Oil	D.C.		110	110	110		31
The Town of Unity	Unity	Oil	3	60	2,300	250	110	2	195
P. Keefner	Vanguard	Oil	D.C.		125	110	110		48
R. H. Collett	Verwood	Oil	D.C.		125		110		40

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Regina—Concluded									
J. J. Gerein	Vibank	Oil	D.C.		120	110	110		33
F. M. Smith	Viceroy	Oil	D.C.		110		110		12
Village of Viscount	Viscount	Oil	D.C.		125		110	4	65
The Town of Vonda	Vonda	Gas	1-3	60	2,200	220	110		96
The Town of Wadena	Wadena	Gas	1-3	60	2,300	220	110		145
Alfred Lepine	Wakaw	Oil	D.C.		110		110		45
Herbert Steer	Walpole	Oil	D.C.		125		110		3
Town of Wapella	Wapella	Oil	D.C.		125		110		70
Mid-West Utilities Ltd	Watrous	Oil	1-3	60	2,200	110/220	110	18	288
The Town of Watson	Watson	Oil	D.C.		125	110	110		20
McPherson Bros	Wawota	Oil	D.C.		125		110		10
F. L. Nicol	Webb	Oil	D.C.		125		110		50
Corporation of Weyburn	Weyburn	Steam	1-3	60	2,200	220	110	62	838
Whitewood Power and Light	Whitewood	Oil			115		110		80
Council of Village of Wilcox	Wilcox	Gas	D.C.		125		110		81
A. Huel	Willow Bunch	Oil	D.C.		125		110		70
The Town of Wilkie	Wilkie	Oil	1-3	60	2,200	220	110	2	262
Northern Light & Power Co., Ltd	Wolseley	Gas	1-3	60	2,300		110		198
Roy Henderson	Woodrow	Oil			110		110		21
The Town of Wynyard	Wynyard	Oil	1-3	60	2,300	220	110		202
The Town of Yellow Grass	Yellow Grass	Gas	D.C.		125		110		94
The City of Yorkton	Yorkton	Oil	1-3	60	2,200/2,300	550/220	110	80	1,077
Young Electric Company	Young	Oil	D.C.		120		110		62
Total number of meters in District of Regina								3,336	47,755
Calgary—									
The Village of Acme	Acme				125		110		
Parks Branch, Dept. of Interior (serving)	Banff	Water	1-3	60	2,200	220/110	110	5	691
	Bankhead								
	Canmore	Steam	1-3	60	2,200		110		103
Can. Pac. Ry., Dept. of Natural Resources	Bassano	Water	3	60	2,400			1	
Corporation of Town of Blairmore	Blairmore	Purchased			220			12	400

The West Canadian Collieries, Ltd	Blairmore	Purchased	3	60		2,300	110	31	70
The West Canadian Collieries, Ltd	Bellevue	Purchased	3	60		2,300	110		336
Big Valley Pr. & Mining Co., Ltd	Big Valley	Steam	3	60	2,300	110/220 2,200/440	110	1	147
The Canmore Coal Co., Ltd	Canmore	Steam	3	60	2,400	220/110	110	39	134
The Town of Cardston	Cardston		2	60	2,200	110	110	15	355
W. C. Auld	Castor		1–3	60	2,300	110/220	110/220	2	116
North American Collieries, Ltd	Coalhurst	Steam	1–3	60	2,300	110	110		142
The Village of Cochrane	Cochrane	Purchased							95
Coleman Lt. & Water Co., Ltd	Coleman	Purchased	3	60	2,300	2,300	220/110	2	495
International Coal & Coke Co., Ltd	Coleman	Purchased	3	60	2,300	2,300	220/110	7	1
McGill'ray Creek Coal & Coke Co., Ltd	Coleman	Purchased	3	60	2,300	2200/440/220	110/220	2	19
Cooley Brothers	Chinook	Gasoline	D.C.		125	115	115	1	30
Canadian Pacific Railway	Calgary	Purchased	1–3	60		200	120		11
The Calgary Water Power Co., Ltd	Calgary	Steam and Water	1–3	60	2,200	220	105	131	2,270
Forest Lawn Power & Light Co., Ltd	Calgary	Purchased	3	60	2,300	220	110	1	63
United Electric & Engineering Co., Ltd. (serving)—	Calgary	Gas	1–3	60	2,300	220/2,200	110/220		
	Arrowwood	Gas	1–3	60	2,300	2,200/220	220/110	1	15
	Bassano							10	147
	Cluny								43
	Gleichen							7	146
	Rockyford	Gas	1–3	60	2,300	2,200/220	220/110	2	20
	Strathmore							9	100
	Standard	Gas	1–3	60	2,300	2,200/200	220/110	1	18
City of Calgary Elec. Lt. Dept	Calgary	Steam	1–3	60	2,300	220	110	628	18,080
Calgary Power Company, Ltd. (serving)	Calgary								
	Aldersyde		3	60		550		1	
	Barnwell		3	60			220/110		39
	Barons		1–3	60		220	110/220		82
	Blackie		1–3	60		220	110/220	4	96
	Brant		1–3	60		220	110/220	1	30
	Calgary Sub-station		3	60		2,300/12,000 55,000		14	
	Carmangay		1–3	60		220		2	81
	Cayley		1–3	60		220	110/220	2	36
	Champion		1–3	60		220	110/220	1	86
	Chin		3	60			220/110		10
	Claresholm		1–3	60		220	110/220	7	274
	Coaldale		1–3	60		220	110/220		26
	Cochrane		3	60	55,000/2,300	2,300		1	
	DeWinton		1–3	60		440/220	110	1	1
	Donaldson Coal Mine		3	60		440		1	
	Elcan Mine		3	60		550	110	1	
	Ensign		1–3	60		220	110/220		11
	Exshaw Substa-tion		3	60		600		2	
	Granum		1–3	60		220	110/220	3	10
	Hardieville		1	60		220	110/220		77
	High River		1–3	60		220	110	18	350

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Calgary—Concluded									
Calgary Power Company, Ltd. (serving) —*Concluded*	Horseshoe Falls Plant	Water	3	60	12,000	55,000/120,00	12,000/2,400 /600	.....	
	Kananaskis Falls Plant	Water	3	60	12,000	55,000/120,00	12,000/2,400 /600		
	Kirkcaldy	.....	1-3	60	.....	220	110/220	2	3
	Lethbridge	.....	3	60	.....	13,000	.....	1	
	Magrath	.....	1-3	60	.....	220	110/220	.....	205
	Monarch	.....	1-3	60	.....	220	110/220	.....	16
	Morley	.....	1-3	60	55,000/2,300	550	110	.....	4
	Nanton	.....	1-3	60	.....	220	110/220	7	204
	Nobleford	.....	1-3	60	.....	220	110/220	.....	29
	Okotoks	.....	1-3	60	.....	220	110/220	4	138
	Olds	.....	1-3	60	2,300	110/220	110	8	300
	Parkland	.....	1-3	60	.....	220	110/220	.....	18
	Stavely	.....	1-3	60	.....	220	110/220	2	80
	Stirling	.....	1-3	60	.....	13,200/220/ 110	110	2	68
	Taber	.....	1-3	60	.....	2,200/220	110/220	7	253
	Vulcan	.....	3	60	.....	2,300	.....	1	
The Town of Didsbury	Didsbury	Steam	1-3	60	2,300	220	110	1	182
Alberta Block Coal Co., Ltd	Drumheller	.....	1-3	60	2,500	250	125	5	
Union Power Company (serving)	Drumheller—								
	Carbon including Hesketh	.....	1-3	60	.....	220/13,200	110	5	146
	Craigmyle	.....	1-3	60	.....	220	110	.....	
	Delia	.....	1-3	60	.....	220	110	5	109
Union Power Company Ltd	Drumheller	Steam	1-3	60	2,300	2,300	110	36	1,335
	Hanna	Steam	1-3	60	2,300	2,300/220	110	12	450
	Mecheche	.....	1-3	60	.....	220	110	1	24
	Morrie	.....	1	60	.....	220	110	3	52
	Munson	.....	1	60	.....	220	110	3	65
	Three Hills	.....	1-3	60	2,300	220	110	.....	120

	Trochu		1–3	60	2,300	220	110		82
	Wayne	Steam	1–3	60	2,300	2,300/220	110	9	100
Endiang Light and Power	Endiang		D.C.		125		110		3
East Kootenay Power Co., Ltd	Fernie		3	60	2,300/6,600	66,000/2,300	220/110	8	
The Village of Frank	Frank	Purchased	3	60			110		52
Hillcrest Collieries Limited	Hillcrest	Purchased	3	60	2,300	550	110	1	18
Hill Spring Power and Light Co	Hill Spring	Gas	3	60	110		110		27
The Town of Innisfail	Innisfail		1–3	60	2,200	110/220	110		217
City of Lethbridge	Lethbridge	Steam	1–3	60	2,300	2,300/220/110	110/220	166	3,349
Town of Macleod	Macleod	Gas	1–3	60	2,300	220/110	110	9	470
Corporation of City of Medicine Hat	Medicine Hat	Steam	1–3	60	2,300	2,300	110	64	1,550
Johnson's Garage	Oyen	Oil	D.C.		115		115		64
Town of Pincher Creek	Pincher Creek	Steam	1–3	60	2,200	110/220	110	7	278
Midwest Utilities Limited	Raymond	Oil	1–3	60	2,200	220	110	10	334
Vulcan Light and Power Co., Ltd	Vulcan	Purchased	1–3	60		220	110	18	266
Ideal Coal Co., Ltd	Wayne	Purchased	3	60		220	110	1	28
Jewel Collieries Ltd	Wayne	Purchased	3	60	2,200	220	110		25
The Rose Deer Coal Mining Co., Ltd	Wayne	Purchased	3	60		220	110	1	
Wallace C. Auld	Youngstown		D.C.		110	110	110		79
Total number of meters in district of Calgary								1,366	35,999
Edmonton—									
Fiss Brothers	Alliance		D.C.		120	120	120		27
Edward G. Hooper	Barrhead		D.C.		120				10
Bashaw Elec. Lt. and Power Plant Ltd	Bashaw	Oil	D.C.		115/125	110	110		75
The Bawlf Garage	Bawlf		D.C.		120	115	115		1
Thorp Bros	Bentley	Gasoline	D.C.		115		115		25
Hector Mateux	Bonnyville		D.C.		110	110	110		9
G. E. Snyder	Botha		D.C.		110		110		20
Bruderheim Electric Company	Bruderheim	Oil	D.C.		110	110	110		47
Blue Diamond Coal Co., Ltd	Brule Mines		1–3	60	2,300	2,200/440	110		
William Heinz	Cadogan		D.C.		125		115		15
Cadomin Coal Company Ltd	Cadomin		1–3	60	2,300	220	110		
The Town of Camrose	Camrose	Steam	1–3	60	2,300	220	110	40	605
Chipman Electric Company	Chipman		D.C.			120		120	48
The Village of Clive	Clive		2		110		110		6
Nelson's Garage	Clyde		2		125	125	125		10
Daysland Electric Light Company	Daysland		D.C.		120		120		55
Edberg Hardware Company	Edberg		D.C.		110	110	110/120		5
City of Edmonton Elec. Lt. & Pr. Dept	Edmonton	Steam	3	60	2,200/13,200	220/2,200	110/220	470	17,890
Marcus Coals Limited	Edmonton	Purchased	3	60		2,200/440/220	110	1	
Grand Trunk Pacific Railway	Edson	Steam	3	60	550	550	110		1
The Edson Light and Power Co., Ltd	Edson	Purchased	1–3	60		220	110	7	360
Dr. F. G. Miller and Dr. A. G. Rose	Elk Point	Gasoline	D.C.		110	110	110		10
North American Collieries Ltd	Evansburg	Steam			250	250	250		
Gustav Mitchell	Forestburg				110/150	110	44/110		19

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Edmonton—Concluded									
Provincial Gaol	Fort Saskatchewan	Steam			220	220	110	1	
The Town of Fort Saskatchewan	Fort Saskatchewan		3	60	2,300	220	110		201
Geo. A. Holben	Galahad		4		32	32	32		
Mid West Utilities Company Ltd	Grand Prairie	Oil	1-3	60	2,200		110		148
G. W. Sharp	Halkirk	Oil			32		32		8
Calgary Power Company Ltd	Hardisty	Gas			220/440	220/440	220		100
Irma Motors	Irma	Oil	D.C.		110		110		21
E. H. Moore	Islay				110	110	110		25
Grand Trunk Railway	Jasper	Steam	3	60	2,200	550	110	2	
Canadian National Parks	Jasper	Steam	1	60	2,200	110/220	110	4	266
The Killam Electric Plant	Killam		D.C.		125		115		50
The Town of Lacombe	Lacombe	Steam	1-3	60	2,300	220	110	42	361
Lamont Electric	Lamont		D.C.			115	115		85
Lavoy Electric	Lavoy	Oil	D.C.		120				8
The Town of Leduc	Leduc	Oil	1-3	60	2,300	115			170
Mannville Garage and Machine Co	Mannville	Gasoline	D.C.		120	120	120		40
Quist & Son	Marwayne				42	32	32		2
E. B. Loucks	Mayerthrope	Oil	D.C.		110	110	110		26
Saunders Ridge Coal Company Ltd	Mercoal		3	60	480	440/220	110		
Millet Electric Light	Millet		D.C.		120		120		39
John Graf	Morinville	Steam	1-2	60	2,200	220	110		52
Mountain Park Collieries, Ltd	Mountain Park	Steam	D.C.		250	250	250		6
Mid-West Utilities Limited	Mundare	Purchased	1-3	60	2,300	13,200	110/220		121
Brazeau Collieries Limited	Nordegg	Steam	3	60	2,400	440	110	3	236
Yoeman Brothers	Onoway				125		125		13
Pickardville Garage	Pickardville	Oil	D.C.		110	110	110		
Town of Ponoka	Ponoka	Purchased	1-3	60	2,200	220	110	95	164
The Government of Province of Alberta	Ponoka	Steam	1-3	60	2,200	220	110	1	
Provost Light and Power Co	Provost	Oil	D.C.				110		42
C. A. Mack	Radway Centre	Gasoline	D.C.		110		110		18
J. W. Austin	Ranfury	Oil	D.C.		120	120	120		20
The Elec. Lt. & Pr. Dept., City of Red Deer	Red Deer	Steam	1-3	60	2,300	220	110	41	542

A. E. Drader	Rimbey		1-3	60	600		110		52
St. Paul Electric Supply Co., Ltd	St. Paul	Steam	1-3	60	2,300		115		85
C. W. Sherrington	Sangudo		D.C.		110	110	110		10
	Smoky Lake								
Spirit River Garage	Spirit River	Gas	D.C.		110				25
Dave Bell	Spruce Grove		D.C.		32				2
The Corporation of Town of Stettler	Stettler	Steam	3	60	2,300	220	110	27	315
Armbruster Lumber Company	Stony Plain		1	60	220	110	110		61
Fraedrich and Carruthers	Strome	Oil	D.C.		125		125		25
D. A. & H. H. Jamieson	Sylvan Lake		D.C.		110	110	110		9
Mid-West Utilities, Limited	Vegreville	Oil	1-3	60	2,300	220	110	25	401
The Town of Vermilion	Vermilion		1-3	60	2,200	110/220	110	20	330
McAthey & Jones	Viking				110	110	110		17
W. W. Walker	Wabamun	Oil			32				1
Wainwright Light and Power Utility	Wainwright	Steam	1-3	60	2,300	220/110	110		275
E. W. McNee	Waskatenan	Oil	D.C.		120	120	120		35
Johnson & Moore	Waterhole		D.C.		115	115	115		10
Robert J. Wheatley	Westlock		D.C.		120		120		56
Corporation of City of Wetaskawin	Wetaskawin	Gas and steam	1-2	60	2,300	220	110	41	598
Total number of meters in district of Edmonton								940	24,309
Nelson—									
The Corporation of City of Armstrong	Armstrong	Water	3	60	2,300	110/220/440/2,200	110	12	290
Adams River Lumber Co., Ltd	Chase	Steam	1	125	1,100		110		55
City of Cranbrook	Cranbrook	Purchased	1-3	60	2,200	220	110	38	934
Chas. O. Rodgers	Creston	Steam	1-3	60	2,200	110/220	110		
Corporation of City of Enderby	Enderby	Oil	3	60	2,200		110		180
East Kootenay Power Co., Ltd	Fernie	Water & steam	3	60	2,300/6,600	66,000/2,300	220/110	7	72
Corporation of City of Fernie	Fernie	Purchased	1-3	60	2,300	220	220/110	23	976
The Crow's Nest Pass Electric Light and Power Co., Ltd	Fernie								
	at Coal Creek Colliery		D.C.		220				
	at Michel Colliery	Purchased	3	60	22,000	22,000	110	8	305
The Canadian Pacific Railway Co	Field	Steam			125		115		27
Golden, Light Power & Water Co., Ltd	Golden	Steam	3	60	2,200	110	110		2
Corporation of City of Grand Forks	Grand Forks	Purchased	1-3	60		2,200/220	110	12	347
Corporation of City of Greenwood	Greenwood	Purchased	2	60		2,200	120		66
Corporation of City of Kaslo	Kaslo	Water	1-2	60	1,100		110/115		
Corporation of City of Kelowna	Kelowna	Purchased	1-3	60		220	110	121	986
Cons. Mining and Smelting Co. of Canada, Ltd	Kimberley	Purchased	3	60	2,200/6,600/550	2,200	110/220	120	746
St. Eugene Concentrator	Moyie	Steam	1-3	60	550	550	220/110	1	47
Nakusp Elec., Light and Power Co.	Nakusp		3	60	2,200	110	110	2	159
Corporation of City of Nelson	Nelson		3	60	12,000	220/440/2,200	110	82	1,764
Denver Light and Power Co., Ltd	New Denver	Water	1-3	60	2,300		110		102

APPENDIX I—Continued

LIST of Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Nelson—Concluded									
District of Peachland	Peachland		1–3	60	2,200	220	110		
Corporation of District of Penticton	Penticton	Water	1–3	60	4,600	110/220	110/220	90	1,260
City of Revelstoke	Revelstoke	Water	1–3	60	2,300	2,200/220	110	25	964
Cascade Water Power and Light Co., Ltd.	Rossland	Purchased	3	60	2,200				
Okanagan Water Power Company	Rossland	Purchased							
South Kootenay Water Power Company	Rossland	Purchased							
Rossland Water and Light Company	Rossland	Purchased							
West Kootenay Power and Light Company Ltd	Rossland	Water	3	60	2,500/7,200	60,000/ 20,000	2,200	59	2,409
Old Enderby Rd. Elec. Lt. Syndicate	Salmon Arm	Oil	1–3	60	2,200	220	110		12
Corporation of City of Salmon Arm	Salmon Arm	Oil	1–3	60	2,200	220	110		219
The Sandon Water Works & Light Co.	Sandon	Water	D.C.		120/125		110		
Sicamous Hotel Power House	Sicamous	Steam			115	115	115	1	8
The Consolidated Mining and Smelting Co. of Canada, Limited	Trail	Purchased	1–3	60		2,200/550	110/220	3	74
Municipality of Coldstream	Vernon	Purchased	1	60		110	110	19	64
The West Canadian Hydro-Electric Corporation Limited	Vernon	Oil	1–3	60	2,300	220	110	43	1,263
Corporation of District of Summerland	West Summerland	Purchased	1–3	60	4,700	220	115/125	13	300
Canadian Pacific Railway Co.	Yahk	Steam	1–3	60	2,300		115		50
Total number of meters in District of Nelson								679	13,681
Vancouver—									
The Granby Consolidated, Mining, Smelting and Power Co., Ltd	Allenby	Purchased	1–3	60		2,200/ 550/440	110/220		
The Granby Consolidated, Mining, Smelting and Power Co., Ltd	Anyox	Water and steam	1–3	60	2,300	2,300/ 440/220	220/110		
Ashcroft Water, Electric and Improvement Co.	Ashcroft		2–3	60	2,300		110		89
The Coalmont Collieries Limited	Blakeburn		1–3	60	550	550	110		70

Britannia Mining and Smelting Co., Ltd.	Britannia Beach	Water	3	60	6,600	440/220	110	59	140
Anthony M. Ruddy	Burns Lake	Gasoline			120	120	120		14
The Chilliwack Electric Co., Ltd.	Chilliwack		3	60	2,200		110		34
Clayburn Company Limited	Clayburn	Purchased	1–3	60	500	2,200/220	110	11	24
Canadian Western Lumber Co., Ltd.	Fraser Mills	Steam	3	60	480	440	480/2,200 110/220	35	
The Hedley Gold Mining Co., Ltd.	Hedley	Water	3	60	2,200	2,200	110		4
Hope Trading and Supply Co.	Hope	Oil	D.C.		110		110		8
The Corporation of City of Kamloops	Kamloops	Water and steam	1–3	60	2,200	2,200/220	110	135	1,839
Kemptville Hydro-Electric Commission	Kemptville	Water	1–3	60	26,000	220	110/220	6	340
McBride Electric Limited	McBride	Steam	1–3	60	2,200		110		52
Corporation of City of Merritt	Merritt	Steam	3	60	2,400	2,400	110	1	385
Nicola Pine Mills Limited	Merritt	Water	1–3	60	480	2,400	110		
Corporation of City of New Westminster	New Westminster	Purchased	1–3	60	2,300	110/220	110	30	5,200
Pacific Mills Limited	Ocean Falls	Water	3	60	2,300/440	2,300/440 and 220	110	6	415
Powell River Co., Ltd.	Powell River	Water	3	50	2,200	2,200/550	110/220	9	29
Corporation of City of Prince George	Prince George	Oil	1–3	60	2,300	2,300/ 110/220	110	5	585
Corporation of City of Prince Rupert	Prince Rupert	Water	1–3	60	4,200/2,400	220/110	110/220	70	1,719
Princeton Light and Power Co., Ltd.	Princeton	Purchased	3	60	2,200	220	110	6	255
James W. Pearson	Quesnel	Oil			110		110		5
Smithers Electric Limited	Smithers	Steam	3	60	2,200	220	110	1	200
International Electric Co., Ltd.	Stewart	Water	3	60	4,400	220	110		106
Pacific Great Eastern Railway Co.	Squamish	Water	3	60	4,200	220/110	110	5	142
F. C. Bishop	Terrace	Gasoline			120				13
Vancouver Power Co., Ltd.	Vancouver	Water	3	60	2,300				
B.C. Electric Railway Co., Ltd.	Vancouver	Steam	1–3	60	2,300	2,300/440/ 220/110	110	2,404	77,568
Western Power Co. of Canada, Ltd.	Vancouver	Water	3	60	4,400				
Total number of meters in District of Vancouver								2,783	89,236
Victoria—									
Corporation of City of Alberni	Alberni	Purchased	1	60		110	110	3	190
B.C. Cement Company, Ltd.	Bamberton	Purchased	1	60			110		
Vancouver Island Power Co., Ltd.	Brentwood	Steam	3	60	2,300	60,000			
The Victoria Lumber & Mfg. Co., Ltd.	Chemainus	Water	1–3	60	600	600	110		189
Corporation of City of Courtenay	Courtenay	Purchased	1–3	25		2,200/ 220/110	110	50	506
Canadian Collieries (Dunsmuir), Ltd.	Cumberland	Water	1–3	25	13,200	2,200/440	110	8	117
Cumberland Electric Lighting Co., Ltd.	Cumberland	Purchased	1–3	25		110/220	110	8	592
Minto Electric Light, Heat and Power Co., Ltd.	Cumberland	Purchased	1	25		110	110	3	28
Duncan Utilities Limited	Duncan	Oil	1–3	60	2,300	110/220	110	5	642
Comox Logging and Railway Co.	Headquarters	Purchased	1–3	25		220	110	1	20
Canadian Grant, Ltd.	James Island	Purchased	1–3	60	2,200	220	110		70
Vancouver Island Power Co., Ltd.	Jordon River	Water	3	60	2,200	60,000			

APPENDIX I—Concluded

LIST OF Electric Light and Power Companies Registered under the Provisions of the Electricity Inspection Act, during the Fiscal Year ended March 31, 1928

District and Company	Address	Type of Prime Mover	Phases of System	Frequency of System	Generator Voltage	Service Voltages		Number of Meters	
						Power	Lighting	Power	Lighting
Victoria—Concluded									
Corporation of City of Ladysmith	Ladysmith	Steam	1-3	60	2,200	220	110		600
The Nanaimo Electric Light, Power and Heating Co., Ltd	Nanaimo	Steam and water	1-3	60	2,300	2,300/220/110	110	40	2,753
Corporation of District of Oak Bay	Oak Bay	Purchased	1	60		220	110	10	25
Parksville Light, Power and Heating Co.	Parksville		D.C.		125	125	125		
Corporation of City of Port Alberni	Port Alberni	Oil	1-3	60	2,300	110/220	110	27	471
B.C. Pulp and Paper Co., Ltd	Port Alice	Steam	3	60	2,200	2,200/440	110	2	4
The Royston Light and Power Co., Ltd	Royston Station	Purchased	1-3	25	13,200	110		1	24
B.C. Cement Company, Ltd	Tod Inlet	Purchased	1	60			110		
Trustees of Will of J. D. Pemberton	Victoria	Purchased	1	60			110		1
J. A. Sayward	Victoria	Purchased	1	60			110		10
Victoria Electric Company	Victoria	Purchased	1	60			110		26
B.C. Electric Railway Co., Ltd	Victoria	Water	1-3	60	750	2,200/440/220	110	469	17,677
Canadian Collieries (Dunsmuir), Ltd	Victoria	Steam	D.C.		220/250	220/250	220/250		
Total number of meters in District of Victoria								627	23,945

SUMMARY

Total Number of Meters, by Provinces, in Use in Canada March 31, 1928

—	Power	Lighting
Prince Edward Island	261	3,989
Nova Scotia	1,663	40,890
New Brunswick	972	33,840
Quebec	9,262	369,818
Ontario	15,693	592,105
Manitoba	2,989	96,383
Saskatchewan	3,336	47,755
Alberta	2,306	60,308
British Columbia	4,089	126,862
	40,571	1,371,950

DEPARTMENT OF TRADE AND COMMERCE
OTTAWA, CANADA

MINISTER
HON. JAMES MALCOLM

DEPUTY MINISTER
F. C. T. O'HARA

ANNUAL REPORT

OF THE

Board of Grain Commissioners for Canada

FOR THE CROP YEAR ENDED AUGUST 31,

1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

BOARD OF GRAIN COMMISSIONERS FOR CANADA

FORT WILLIAM, ONT., January 30, 1929.

The Hon. JAMES MALCOLM, M.P.,
Minister of Trade and Commerce,
Ottawa, Canada,

SIR,—We have the honour to submit the following report as required by section 15, chapter 33, 15-16 George V, "An Act respecting Grain".

Your obedient servants,

LESLIE H. BOYD,
Chief Commissioner.

M. SNOW,
Grain Commissioner.

JAMES ROBINSON,
Grain Commissioner.

F. J. RATHBONE,
Secretary.

TABLE OF CONTENTS.

CHAPTER I

PAGE

Standards, Survey and Appeal Boards:—
- Part I. Grain Standards Boards 5
- Part II. Grain Survey Boards 8
- Part III. Boards of Grain Appeal 8

CHAPTER II

Report of the Chief Inspector 9

CHAPTER III

Report of the Registrar 12

CHAPTER IV

Report of the Chief Weighmaster 13

CHAPTER V

Reports:—
- (a) Licensing and Bonding 21
- (b) Loading Platforms 24
- (c) Cars out of turn 24
- (d) Complaints 24

CHAPTER VI

Elevator Tariffs:—
- Tariff—Terminal Elevators, 1928–29 25
- " Government Interior Terminal Elevators, 1928–29 27
- " Country Elevators, 1928–29 30
- " Vancouver, B.C., 1928–29 33

CHAPTER VII

Official Weigh-up, 1928 37

CHAPTER VIII

Sessions held by the Board 38

CHAPTER IX

Revenue and Expenditure 39

CHAPTER 1

STANDARDS, SURVEY AND APPEAL BOARDS

PART 1.—THE GRAIN STANDARDS BOARDS

1. *Western.*—K. Campbell, Vancouver, B.C. (Chairman); C. S. Langille (Vice-Chairman), Winnipeg, Man.; T. J. Harrison, Winnipeg, Man.; Geo. Serls, Winnipeg, Man.; H. Sellers, Winnipeg, Man.; Jas. Carson, Winnipeg, Man.; W. A. Matheson, Winnipeg, Man.; C. N. Bell, Secretary, Winnipeg, Man.; Samuel Larcombe, Birtle, Man.; Donald MacRae, Regina, Sask.; Hon. C. M. Hamilton, Regina, Sask.; J. H. Robson, Leney, Sask.; A. E. Wilson, Indian Head, Sask.; W. J. Rutherford, Saskatoon, Sask.; J. Wellbelove, Estan, Sask.; T. O. King, Raymond, Alta.; W. H. Fairfield, Lethbridge, Alta.; Geo. Bennett, Manville, Alta.; J. Gillespie, Edmonton, Alta.; R. A. Thompson, Lynden, Ont.; C. B. Watts, Toronto, Ont.; H. Sellers, Fort William, Ont.; R. E. Lee, Vancouver, B.C.; Wm. Mohler, Strome, Alta.; W. W. Cumming, Calgary, Alta.

2. *Eastern*—Toronto: H. H. Goode, F. W. Hay, A. O. Hogg, R. I. Braiden, H. L. Rice, C. B. Watts, S. Hisey, C. W. Band, Murray Brown, T. D. Duncombe, J. S. Jeffrey, W. H. McCarthy, F. D. Tolchard, Secretary.

Montreal: H. D. Dwyer, N. Wight, A. G. Burton, A. A. Bowen, W. MacDonald, F. A. Heywood, H. C. Beatty, Secretary.

GRAIN STANDARDS BOARDS

MONTREAL, QUE.

COPY OF THE MINUTES OF THE MEETING OF THE EASTERN GRAIN STANDARDS BOARD HELD SEPTEMBER 23, 1927

Present: N. Wight, chairman; W. MacDonald, A. Geo. Burton.

The board fixed the standard for the following grades of United States grain, samples of which were deposited with the Inspector and myself:—

No. 2 Amber Durham (temporary standard).

No. 2 Hard Winter Wheat (permanent standard for season's crop).

The meeting adjourned.

COPY OF THE MINUTES OF THE MEETING OF THE EASTERN GRAIN STANDARDS BOARD HELD OCTOBER 4, 1927

Present: N. Wight, chairman; A. Geo. Burton, H. D. Dwyer.

The board fixed the standards for the following grades of United States grain, samples of which were deposited with the inspector and myself:—

No. 1 Northern Spring Wheat.

No. 2 Northern Spring Wheat.

The meeting adjourned.

MONTREAL, QUE.

COPY OF THE MINUTES OF THE MEETING OF THE EASTERN GRAIN STANDARDS BOARD HELD OCTOBER 17, 1927

Present: N. Wight, Chairman; A. Geo. Burton, Wm. MacDonald.

The board fixed the standards for the following grades of United States grain, samples of which were deposited with the Inspector and myself:—

No. 2 Rye Western.
No. 2 Red Winter Wheat.
No. 2 Mixed Durum Wheat.
No. 2 Red Durum Wheat.
No. 2 Amber Durum Wheat.

The meeting adjourned.

MONTREAL, QUE.

COPY OF THE MINUTES OF THE MEETING OF THE EASTERN GRAIN STANDARDS BOARD HELD NOVEMBER 14

Present: Leslie H. Boyd, Chairman; M. Snow, Jas. Robinson, representing the Board of Grain Commissioners; N. Wight, A. Geo. Burton; H. D. Dwyer, E. S. Jaques; Wm. MacDonald, representing the Corn Exchange Association, together with A. A. Bowen, Inspector, and H. C. Beatty, Secretary.

Mr. Boyd explained that the reason for coming to visit the Standards Board was found in a letter from Mr. Jas. D. Fraser, under date October 31, the contents of which were forwarded to the members of the Standards Board. After some discussion the whole question was centred in the matter of dockage. Finally it was understood that the Standards Board would set the standard for seaboard inspection of Durum Wheat as follows: "All such grain containing foreign matter under two per cent will be free of dockage; all such grain containing foreign matter from two per cent up to two and one-quarter per cent inclusive, a dockage of one-half per cent will be set; all such grain containing foreign matter over two and one-quarter per cent and not exceeding two and one-half per cent a dockage of one per cent will be set. This arrangement to become effective immediately."

The Chairman of the Board of Grain Commissioners asked the secretary to write to Mr. T. H. Reeves and advise him that, owing to his inability to attend meetings of the Grain Survey Board, he had been replaced by Mr. Alfred Chaplin, also to notify Mr. Chaplin; and that Mr. E. S. Jaques, at his own request, be relieved of his duties. Mr. Robert Hume was appointed in place of Mr. Jaques.

The meeting adjourned.

(Sgd.) H. C. BEATTY,
Secretary.

TORONTO, ONT.

COPY OF THE MINUTES OF THE MEETING OF THE EASTERN GRAIN STANDARDS BOARD HELD NOVEMBER 1, 1927

Present: Messrs. Murray Brown, J. Carrick, F. W. Hay, S. Hisey, A. O. Hogg, H. L. Rice and C. B. Watts.

Chairman.—On motion, Mr. Samuel Hisey was appointed chairman of the meeting.

Minutes.—The minutes of the meeting of the Grain Standards Board held November 5, 1926, were read and confirmed.

Commercial Grades.—Samples of wheat collected from various parts of the province were examined with a view to setting the Commercial Grades for the season 1927-28. It was agreed that one Standard only, No. 1 Commercial Wheat, should be set, and it was moved by Mr. F. W. Hay and seconded by Mr. Murray Brown that the sample as defined in the minutes of the meeting of the board held on November 5, 1926, be confirmed, namely: No. 1 Commercial Wheat shall be either red, white, or mixed winter or spring wheat, reasonably clean, shall weigh not less than 56 pounds to the bushel, shall allow a maximum of 10 per cent sprouted grain, and shall not contain a greater percentage of smut than the standard sample—Carried.

On motion, Messrs. A. A. Bowen and W. J. MacNeill, Grain Inspectors, were requested to prepare a sample in accordance with the resolution adopted.

The sample of No. 1 Commercial Wheat with sprouts and smut, as prepared by the Grain Inspectors, was examined and it was moved by Mr. H. L. Rice, seconded by Mr. C. B. Watts, that the sample prepared by Messrs, A. A. Bowen and W. J. MacNeill, Grain Inspectors, and submitted to the Grain Standards Board, be accepted as the Standard for No. 1 Commercial Wheat—Carried.

The meeting then adjourned.

F. D. TOLCHARD, *Secretary.* S. HISEY,

WINNIPEG, MAN.

COPY OF THE MINUTES OF THE MEETING OF THE WESTERN GRAIN STANDARDS BOARD HELD ON OCTOBER 9 AND 10, 1928

Present: Mr. K. Campbell (Chairman); Mr. C. S. Langille (Vice-Chairman); Prof. T. J. Harrison; Messrs. S. Larcombe, D. MacRae, A. E. Wilson; Dean Rutherford; Messrs. J. H. Robson, J. Wellbelove, T. A. King, Geo. Serls, W. H. Fairfield, Geo. Bennett, J. Gillespie, C. B. Watts, H. Sellers (Fort William), Mr. H. Sellers (Winnipeg), Wm. Mohler, W. W. Cumming, Jas. Carson, W. A. Matheson, and C. N. Bell, Secretary.

Members assembled at 10 a.m. October 9. Minutes of the meeting held October 24 and 25, 1927, were read and confirmed.

A general interchange of views on the condition and character of the grain included in the crop of Western Canada this season then took place. Mr. Jas. D. Fraser, Chief Grain Inspector, and Dr. Birchard, Chemist, answering many inquiries for information.

Moved by W. A. Matheson and A. E. Wilson, "That the Board of Grain Commissioners be recommended that the Hon. W. R. Motherwell, Minister of Agriculture, be appointed to membership in this Board"—Carried unanimously.

Moved by C. B. Watts and A. E. Wilson, "That the Board of Grain Commissioners be recommended to place in membership on this Standards Board, the sitting Minister of Agriculture for the Dominion, and the sitting Ministers of Agriculture for the provinces of Manitoba, Saskatchewan and Alberta."—Carried unanimously.

The members then adjourned to the room containing the grain samples of the crop as procured by the Chief Grain Inspector, and during the remainder of October 9 and on October 10, prepared samples for acceptance as standards.

In each case by unanimous vote, the standards for Commercial Grades, Four, Five and Six wheat were selected and established.

The following resolutions were then passed by unanimous vote of all present, viz:—

1st. "That all barley not good enough to grade as No. 4 be graded as 'Feed' in the discretion of the inspector."

2nd. "That all wheat not good enough to grade as No. 6 be graded 'Feed' in the discretion of the inspector.

3rd. "A committee be, and is hereby appointed under the provisions of the Canada Grain Act, to meet, and if it proves to be necessary on account of climatic conditions, to select and establish other Commercial Grades of grain. The members of this committee to be the chairman, vice-chairman and all members of this board resident in Winnipeg."

4th. "Moved by George Bennett and J. H. Robson, That the Board of Grain Commissioners be requested to provide that in addition to the railway and sleeping car fare, members of the Western Grain Standards Board be allowed fifteen dollars ($15) per diem allowance to cover maintenance expenses, while en route, and during the time taken in selecting the grain standards."—Carried unanimously.

The meeting adjourned.

(Sgd.) C. N. BELL,
Secretary.

PART II—GRAIN SURVEY BOARDS

1. *Toronto.*—D. Plewes, D. O. Ellis, A. O. Hogg, H. H. Goode, D. A. Campbell, S. Hisey, C. B. Watts, R. I. Braiden, C. W. Band, Murray Brown, W. H. McCarthy; F. D. Tolchard, Secretary.

2. *Montreal.*—C. B. Esdaile, A. G. Burton, Alfred Chaplin, Jos. Quintal, J. M. Vittie, Robert Hume; H. C. Beatty, Secretary.

REPORTS OF THE SURVEY BOARDS FOR THE YEAR ENDED AUGUST 31, 1928

—	Number of Surveys Held	Number of Surveys Raised	Number of Surveys Lowered	Number of Surveys Sustained
Montreal	8	3	Nil	5
Toronto	Nil	Nil	Nil	Nil

PART III—BOARDS OF GRAIN APPEAL

1. *Winnipeg.*—Geo. Serls, Chairman; R. C. Steele, P. V. Wright, Walter Duncan, Alfred F. Moore, Geo. J. Wells, Jas. McMahon, S. C. Swanton, A. Thompson; C. N. Bell, Secretary.

2. *Calgary.*—Geo. Hill, Chairman; W. McLeod, S. J. Ewing, Arthur Pierson, J. A. Harris, E. J. Munson, C. W. Roenisch, D. L. McLean, Willard W. Cumming; D. O. McHugh, Secretary.

3. *Edmonton.*—C. R. Manahan, Chairman; W. H. Boyle, L. T. Ingram, F. J. Wolfe, Clyde C. Gillies, R. H. Settle, A. Fraser, J. A. Kyle, J. W. Allen; John Blue, Secretary.

REPORTS OF THE APPEAL BOARDS FOR THE YEAR ENDED AUGUST 31, 1928

—	Number of Appeals Held	Number of Appeals Raised	Number of Appeals Lowered	Number of Appeals Sustained
Winnipeg	2,004	131	21	1,852
Calgary	1,672	321	28	1,323
Edmonton	1,496	165	7	1,324

CHAPTER II

REPORT OF MR. J. D. FRASER, CHIEF GRAIN INSPECTOR

WINNIPEG, MAN., November 1, 1928.

The Secretary,
Board of Grain Commissioners,
Fort William, Ont.

DEAR SIR,—Herewith is my annual report for the crop year ending July 31, 1928.

WESTERN INSPECTION DIVISION

The crop of the year 1927 was the third largest produced in the Western Inspection Division, being surpassed only by the crop of 1915 by 769 cars, and by the crop of 1923 by 3,452 cars.

The ripening and harvesting of the crop was much later than usual, and while the cutting was practically all completed during September, the harvesting and threshing operations were frequently and seriously delayed during September and the first part of October by rain and snow, which not only delayed operations but caused a very large proportion of the crop to be graded as No Grade Tough or Damp, on account of excess moisture. Better weather conditions during the later part of October, dried out much of the grain and substantially reduced the proportion of tough and damp grain. About 75 per cent of the threshing was completed by the end of October. Rain and snow during November made it impossible to complete the threshing before winter set in, with the consequence that quite a large quantity of grain had to be left in stook in the fields and threshed in the spring of 1928. Rust in Manitoba and parts of Saskatchewan, and frost in parts of Saskatchewan and Alberta, together with excess moisture, materially lowered the quality and grade of a very large proportion of the crop of 1927.

The total inspections for the crop year of 1927-28 in the Western Division, amounted to 353,253 cars, as against 305,903 cars for the previous year.

The total inspections from August 1, 1927, to July 31, 1928, are made up as follows:—

	Cars		Cars
Wheat	300,879	Mixed grain	860
Oats	19,936	Buckwheat	8
Barley	19,065	Speltz	—
Flax	3,481	Corn	5
Rye	8,892	Screenings	127
Total			353,253

The grades of wheat show as follows:—

	Cars	Percentage
1 Hard, 1 Northern, 2 Northern, 3 Northern	92,606	30·78
No. 4, No. 5 and No. 6	60,381	20·07
No Grade Tough or Damp	130,428	43·34
Other grades	4,754	1·58
Amber Durum—All grades	11,342	3·77
White Spring—All grades	974	·32
Kota—All grades	63	·03
Winter—All grades	234	·08
Red Durum—All grades	97	·03
	300,879	100%

The grades of oats show as follows:—

	Cars	Percentage
No. 1, 2 and 3 Canada Western	4,224	21·19
Ex. 1 Feed, 1 Feed and 2 Feed	5,458	27·38
No Grade Tough or Damp	10,151	50·92
Other grades	103	·51
	19,936	100%

The grades of barley show as follows:—

	Cars	Percentage
No. 3 Extra, No. 3 and 4 Canada Western	4,864	25·51
Feed and Rejected	533	2·80
No Grade Tough or Damp	13,668	71·69
Other grades	—	—
	19,065	100%

The grades of flax seed show as follows:—

	Cars	Percentage
No. 1 Northwestern and 2 Canada Western	2,364	67·91
No. 3 Canada Western	287	8·25
No Grade Tough or Damp	791	22·72
Other grades	39	1·12
	3,481	100%

The grades of rye show as follows:—

	Cars	Percentage
No. 1, 2 and 3 Canada Western	4,170	46·90
No Grade Tough or Damp	4,222	47·48
Other grades	500	5·62
	8,892	100%

The number of cars of grain inspected at the various inspection points in the Western Division were as follows:—

	Cars		Cars
Winnipeg	235,410	Medicine Hat	3,480
Calgary	40,784	Superior	836
Edmonton	36,337	Vancouver	1,755
Moose Jaw	29,644	Prince Rupert	261
Saskatoon	4,746		
Total			353,253

A reinspection was called on 84,103 cars, or 23·80 per cent of total inspections, with results as follows:—

	Cars	Percentage	Percentage of Total Inspections
Left as graded	73,279	87·13	20·75
Grades raised	7,934	9·43	2·24
Grades lowered	825	·98	·23
Dockage raised	790	·94	·22
Dockage lowered	1,275	1·52	·36
	84,103	100%	23·80%

An appeal was called at Winnipeg on 1,994 cars with results as follows:—

	Cars	Percentage
Left as graded originally	1,842	92·37
Grades raised	131	6·57
Grades lowered	21	1·05
Dockage raised	nil	—
Dockage lowered	nil	—
	1,994	100%

An appeal was called at Calgary on 1,639 cars, with results as follows:—

	Cars	Percentage
Left as graded originally	1,296	79·07
Grades raised	241	14·70
Grades lowered	23	1·40
Dockage raised	5	·31
Dockage lowered	74	4·52
	1,639	100%

An appeal was called at Edmonton on 1,485 cars, with results as follows:—

	Cars	Percentage
Left as graded originally	1,167	78·58
Grades raised	163	10·98
Grades lowered	30	2·02
Dockage raised	48	3·24
Dockage lowered	77	5·18
	1,485	100%

RECAPITULATION OF APPEALS

	Cars	Percentage of 353,253 Cars, or Total Cars Inspected	
Total cars appealed	5,118		1·448
Left as graded originally	4,305	1·218	
Grades raised	535	·151	
Grades lowered	74	·021	
Dockage raised	53	·015	
Dockage lowered	151	·043	
			1·448

Shipments of grain from Fort William, Port Arthur, Vancouver and Prince Rupert, during the year August 1, 1927, to July 31, 1928:—

—	Fort William and Port Arthur	Vancouver	Prince Rupert	Total
	Bushels	Bushels	Bushels	Bushels
Wheat	259,247,895	84,392,321	7,929,190	351,568,406
Oats	20,238,295	841,546	6,786	21,086,627
Barley	25,467,259	73,411	.....	25,540,670
Rye	12,100,720	258,157	.....	12,358,877
Flax Seed	4,089,902	.....	.....	4,089,902
Mixed grain	436,053	.....	.....	436,053
	321,580,124	85,565,435	7,935,976	415,080,535

Eastern Inspection Division

RECEIPTS AND EXPENDITURES—YEAR ENDING JULY 31, 1928

—	Montreal	Toronto	Total
Receipts—			
Inspection fees	$ 78,876 00	$ 857 00	$ 79,733 00
Miscellaneous	13,065 25	333 98	13,399 23
	$ 91,941 25	$ 1,190 98	$ 93,132 23
	Montreal	Toronto	Total
Expenditures—			
Salaries	$ 30,275 60	$ 7,660 00	$ 37,935 60
Miscellaneous	7,340 51	1,245 15	8,585 66
	$ 37,616 11	$ 8,905 15	$ 46,521 26

	Receipts	Expenditures		
Montreal	$ 91,941 25	$ 37,615 11	Surplus...	$ 54,325 14
Toronto	1,190 98	8,905 15	Deficit...	7,714 17
	$ 93,132 23	$ 46,520 26	Surplus...	$ 46,610 97
Less cost of Eastern Standards Board			$ 334 81	
" cost of audit			200 00	
				534 81
Net surplus				$ 46,076 16

Yours truly,

(Sgd.) JAS. D. FRASER,

Chief Inspector.

CHAPTER III

REPORT OF MR. W. T. TODD, DEPUTY REGISTRAR

Winnipeg, Man., January 4, 1929.

F. J. Rathbone, Esq.,
Secretary Board of Grain Commissioners,
Fort William, Ont.

Dear Sir,—I herewith submit a statement showing the work of the Registration Department for the crop year ended August 31, 1928:—

Total Bushels Registered		Total Bushels Registered for Cancellation	
Wheat	306,153,596-30	Wheat	312,425,701-30
Oats	22,760,994-33	Oats	22,802,076-16
Barley	21,309,618-47	Barley	21,286,647-00
Flax	3,477,565-00	Flax	4,567,715-36
Rye	12,604,107-24	Rye	12,562,656-30
Mixed grain	972,538-29	Mixed grain	1,456,751-49
Corn	94,766-44	Corn	97,093-46

Yours truly,

(Sgd.) W. T. TODD,

Deputy Registrar.

CHAPTER IV

REPORT OF MR. J. G. WHITE, CHIEF WEIGHMASTER

The Secretary,
Board of Grain Commissioners,
Fort William, Ontario.

DEAR SIR,—Herewith is my annual report for the crop year ending July 31, 1928.

ELEVATORS

The annual report covering the work of the Government weighing service presents little variation from year to year except as showing the increasing quantities of grain officially weighed into, and out of the elevators, and the continued expansion of elevator equipment and storage to keep pace with requirements for the more expeditious handling of the crop and to prevent as far as possible any congestion in the flow of grain from the producers to the sea board.

The report for the crop year ending July 31, 1927, showed thirty-two (32) elevators at Fort William and Port Arthur, six (6) public terminal and twenty-six (26) private, with a total storage capacity of seventy-one million seven hundred and five thousand (71,705,000) bushels.

During the crop year ending July 31, 1928, there have been thirty-three (33) elevators in operation at the Head of the Lakes, five (5) public and twenty-eight (28) private and hospital, which with additions to existing plants brings the total storage to eighty-three million, seven hundred and eighty thousand (83,780,000) bushels, an increase of 12,075,000 bushels over last year, thus enabling Fort William and Port Arthur to maintain their outstanding position as the largest grain handling and storage ports on the continent.

There has also been a very marked increase in the quantities of grain weighed into and out of the elevators at Vancouver. During the crop year under review there was weighed in and out over one hundred and eighty million (180,000,000) bushels of grain against about eighty and a half million (80,500,000) bushels in the previous year.

Due to the increase in elevators and the amount handled, it was necessary to increase the weighing staff at Vancouver in order to meet the demands of the trade.

The equipment for weighing and transferring grain in the elevators has been kept in good condition.

SCALES

There are 199 scales of varying capacity up to 75 tons in constant use in the elevators at Fort William and Port Arthur, over which approximately 695,984,250 bushels of grain has been weighed during the crop year ending July 31, 1928, and notwithstanding the enormously heavy duty to which they have been subjected, they have (with the constant services of an expert scale mechanic) been kept in good repair to meet the requirements for official weighing.

In addition to the above there are 91 scales in use in the Government Interiors at Moose Jaw, Saskatoon, Calgary, Edmonton, Prince Rupert, and the terminal elevators at Vancouver, or a total of 290 scales which have been subjected to a thorough inspection twice during the year. The semi-annual test

was made to insure the continued accuracy of the scales and for which no charge was made, and the regular annual inspection as provided for by the Weights and Measures Act was carried out—certificates of verification were issued and fees collected and remitted to the following district inspectors:—

Mr. J. B. Attridge, Winnipeg	$ 2,283 75
Mr. E. B. Lorrimer, Regina	79 60
Mr. W. Wallace, Saskatoon	77 60
Mr. A. E. H. Cable, Calgary	75 30
Mr. J. McLeod, Edmonton	68 80
Mr. A. H. Dutton, Prince Rupert	68 85
Mr. A. H. Dutton, Vancouver	542 60
	$ 3,196 50

(See detailed statement attached.)

Eastern Division Scale Inspection

The inspection of scales in the elevators at Goderich, Sarnia, Owen Sound, Port McNicoll, Depot Harbour, Midland, Tiffin, Port Colborne, Peterborough, Montreal, Quebec, St. John, and Halifax was carried out by Mr. A. A. Bowen, Inspector in charge at Montreal.

Weighing Staff

Number of outside men August 1, 1927		122
Number of office staff August 1, 1927		11
Number of men engaged, 1927	12	
Transferred from office to outside	1	
Transferred from Keewatin to outside	1	
		14
		147
Laid off January, 1928	12	
Resigned	2	
Died	1	
		15
		132
Re-engaged April, 1928		7
At Fort William and Port Arthur, July 31, 1928		139
At Kenora		1
At Keewatin		3
At Winnipeg—Office staff		7
At Winnipeg—Weighmen		17
At Winnipeg—Seal and leak inspectors		30
At Portage la Prairie		2
At Moose Jaw		3
At Saskatoon		5
At Medicine Hat		3
At Calgary		10
At Edmonton		3
At Prince Rupert		2
At Vancouver		22
Total number on weighing staff August 1, 1928		247

Leak and Seal Inspection

Following is a report of the work of the Leak and Seal Inspectors in the railway yards at Winnipeg and Transcona for the year ending July 31, 1928:—

—	Cars inspected	Cars leaking and defective	Per cent.
Canadian Pacific Railway yards	152,176	45,449	29·1
Canadian National Railway yards	71,813	13,055	18·1
Grand Trunk Pacific yards	53,108	8,415	15·8
Total	277,097	66,919	Avge. 21

Summary

Cars inspected	277,097
Cars leaking and defective	66,919
Condition reports completed for the grain trade	41,723

In completing the above large number of condition reports, their own forms partly filled in are supplied by the different companies, and a great amount of clerical work is required in the Weighmaster's office in searching the records, checking entries already on the forms, and supplying further information required, such as date of inspection, kind and grade of grain, seal record and condition at inspection, seal record at destination, date and where unloaded, depth of load and weight per bushel, outturn weight and condition of car at unloading, making the condition report practically a complete record of the car on that particular trip.

As condition reports assist shippers in the collection of claims for shortages, arrangements have been made to charge a fee for supplying these records.

WEIGHING

Following are the quantities of grains which were weighed into and out of the elevators at Fort William, Port Arthur and western points during the crop year ending July 31, 1928:—

RECEIPTS AND SHIPMENTS

Receipts	Cars	Bushels
All grains	248,552	351,875,756
Screenings, 5,422 tons	196	
Shipments—Rail	24,931	35,399,490
1,298 cargoes—Lake		308,709,003
Screenings 87,483 tons.		
Total Fort William-Port Arthur	273,679	695,984,249
At Kenora	2,685	4,020,598
At Keewatin	6,615	9,373,641
At Transcona	12,650	16,794,807
At Winnipeg	28,721	41,926,331
At Portage la Prairie	1,845	2,591,717
At Moose Jaw	5,434	7,607,600
At Saskatoon	3,864	5,409,600
At Medicine Hat	4,097	5,735,800
At Calgary	13,638	19,093,200
At Edmonton	2,015	2,821,000
Government Interior Elevators—		
At Moose Jaw	3,311	4,761,089
At Saskatoon	2,953	4,476,542
At Calgary	7,002	10,808,693
At Edmonton	6,750	9,003,274
At Prince Rupert—Receipts	6,181	8,145,459
Other shipments		7,935,917
Screenings, 2,885 tons.		
At Vancouver—Receipts	63,174	88,432,279
Rail shipments	2,232	2,423,315
Ocean shipments, 503 cargoes		79,731,456
Screenings, 14,911 tons.		
	446,846	1,027,076,567

Report of Cars Arriving at Destination with Missing or Defective Seals During the Crop Year Ending July 31, 1928

Month	Canadian Pacific Railway	Canadian National Railways	Total
1927—August	97	47	144
September	333	123	456
October	1,496	859	2,355
November	1,837	1,286	3,123
December	999	917	1,916
1928—January	585	562	1,147
February	247	212	459
March	99	94	193
April	34	17	51
May	409	370	779
June	448	503	951
July	401	459	860
	6,985	5,449	12,434

Summary—

Via Canadian Pacific Railway	6,985
Via Canadian National Railways	5,449
	12,434

Report of Cars Leaking on Arrival at Destination During the Crop Year Ending July 31, 1928

CANADIAN PACIFIC RAILWAY

Month	Grn. door	Drpost	End	Draw-bar	Side	K.B.	Floor	Totals
1927								
August	56	34	107	26	199	.....	21	443
September	92	147	209	77	917	5	48	1,495
October	412	390	781	276	1,793	5	133	3,790
November	637	313	575	358	1,843	1	35	3,762
December	135	82	150	80	1,091	2	18	1,558
1928								
January	100	74	121	42	581	2	3	923
February	47	44	77	32	822	.....	15	1,037
March	21	52	30	13	202	1	5	324
April	10	17	76	3	120	.....	2	228
May	185	217	465	108	1,475	1	20	2,471
June	137	141	399	124	550	4	22	1,377
July	104	100	219	85	344	1	28	881
Totals	1,936	1,611	3,209	1,224	9,937	22	350	18,289

REPORT OF CARS ARRIVING LEAKING (Continued)

CANADIAN NATIONAL RAILWAYS

Month	Grn. door	Drpost	End	Draw-bar	Side	K.B.	Floor	Totals
1927								
August	8	7	54	23	213	1	4	310
September	59	195	3	30	565	.....	20	872
October	212	410	45	175	1,630	1	48	2,521
November	137	268	39	130	1,035	3	30	1,642
December	103	156	6	61	696	1	17	1,040
1928								
January	114	288	15	53	866	.....	5	1,341
February	10	6	60	20	233	.....	5	334
March	6	8	50	14	185	1	3	267
April	4	3	20	.....	39	.....	.....	66
May	126	250	41	118	995	4	18	1,552
June	103	109	37	132	730	8	30	1,149
July	166	234	310	42	354	2	17	1,125
Totals	1,048	1,934	680	798	7,541	21	197	12,219

SUMMARY

Canadian Pacific Railway	18,289
Canadian National Railways	12,219
Total	30,508
Cars transferred on account of bad order	97

SHORTAGES—CARS

The primary object of the Government grain weighing service is for the protection of both the seller and the buyer, thus making it a very vital factor in the grain trade. As a matter of fact all the business in the terminals is based on correct weights, and to this end the scales and weighing equipment in the terminals are under constant observation and kept in first-class condition and every care is taken to get accurate weights and maintain confidence in the validity of the government weight certificates.

During the crop year ending July 31, 1928, there were 30,508 leak reports sent out to shippers and only 218 complaints came to us direct; investigations showed that the greater number of the latter were due to leaking cars, and where evidence was found indicating that a mix or mistake had occurred at unloading, adjustments were secured or recommended for 5,012 bushels, including leaks.

Considering that 446,846 cars were weighed during the crop year, the number of complaints of shortages on the outturns are remarkably small and indicates that the Government grain weighmen have exercised close and careful supervision over the weighing.

SHORTAGES—VESSELS

Cargoes loaded at Fort William and Port Arthur for the crop year, and unloaded at Canadian ports reported shortages varying from 2 pounds to 40 pounds per 1,000 bushels on wheat, an average of 18 pounds per 1,000 bushels, and on coarse grain 37·5 pounds per 1,000 bushels. Conditions prevalent at Canadian ports show little variation from previous years, some elevators continue to report outturns with an average shortage of only 7 pounds per 1,000 bushels and others with an average shortage of 34 pounds per 1,000 bushels on wheat.

Outturns on Canadian cargoes unloaded at American ports show from 5 pounds over to 22 pounds short per 1,000 bushels, or an average shortage of 5 pounds per 1,000 bushels on wheat, and the average shortage on coarse grains was 34 pounds per 1,000 bushels.

On total lake shipments of 253,734,822 bushels of wheat to Canadian and American ports during the crop year ending July 31, 1928, the general average shortage was reported as 5 pounds per 1,000 bushels, which remarkably low average would apparently be due to overages reported on a number of cargoes unloaded at American ports.

There were a number of serious shortages reported on the outturn of cargoes, but a recheck showed the loading weights to be correct, and on a careful investigation at the loading elevators, nothing was found to cause a shortage at loading.

Annual Weigh-up

Stocks in the five (5) public terminals at the head of the lakes were heavy in July, 1928, and to avoid unnecessary handling it was found advisable to allow them to be reduced by shipment before commencing the weigh-up, which was carried on at intervals during August and completed on the 31st, some three and a half million bushels being weighed and transferred and the usual itemized statements of the correct quantities of each grade in store were prepared and forwarded to the board.

The inspection of scales and the annual audit of all grain in store at the Government interior elevators at Moose Jaw, Saskatoon, Calgary, Edmonton, and the Terminals at Vancouver was made in August and a report of the correct quantities and grades in store was prepared and sent to the board.

At their own request, a number of private elevators were weighed-up and for this service a fee of 50 cents per 1,000 bushels was charged.

Organization

Owing to the increase in elevators and expansion of trade, it was necessary to increase the weighing staff to take care of the work. The men have shown themselves competent and loyal, and under the supervision of Mr. J. T. Hollinshead, Assistant Chief Weighmaster at the head of the lakes, Mr. W. Adams, Weighmaster at Winnipeg, and Mr. S. M. Capon, Weighmaster at Vancouver, they have carried out their duties efficiently and their work has been satisfactory to the trade wherever they have been stationed.

J. G. WHITE,
Chief Weighmaster.

January 2, 1929.

Report of Scale Inspection in Elevators at Fort William and Port Arthur, Also Interiors, Year 1928

Name of Elevator	Date of Construction	Storage	Number of Scales	Make	Capacity	Shipping	Receiving	Date Installed	Inspection Weights and Measures	Fees	Board Inspection No charge	Special Inspections as occasion called for
		Bush.			Lbs.					$ cts.		
Public Terminals—												
Grand Trunk Pacific	1910	5,750,000	10 hoppers	Gurney	120,000	5	5	1910	Annually	120 00	Semi-annually	1 special test.
Canadian Government	1913	3,250,000	10 hoppers	Fairbanks	120,000	5	5	1913	Annually	120 00	Semi-annually	1 special test.
Saskatchewan Pool No. 4	1917	6,425,000	8 hoppers	Gurney	120,000	4	4	1917	Annually	96 00	Semi-annually	1 special test.
Saskatchewan Pool No. 6	1920	7,500,000	9 hoppers	Fairbanks	120,000	5	4	1920	Annually	108 00	Semi-annually	
Private and Hospital—												
Northland "D"	1896	7,500,000	3 hoppers	Fairbanks	96,000	3		1896	Annually	36 00	Semi-annually	
"	1908		4 hoppers	Gurney	96,000	4		1908	Annually	48 00	Semi-annually	
"	1908		4 hoppers	Gurney	120,000		4	1908	Annually	48 00	Semi-annually	
"	1914		5 hoppers	Gurney	60,000	5		1914	Annually	40 00	Semi-annually	1 special test.
Ogilvies	1908	3,000,000	4 hoppers	Gurney	120,000		4	1914	Annually	48 00	Semi-annually	
"	1908		2 hoppers	Fairbanks	30,000	2		1908	Annually	12 00	Semi-annually	
Saskatchewan Pool No. 8 (B. &E.)	1903	2,500,000	8 hoppers	Fairbanks	100,000	4	4	1903	Annually	96 00	Semi-annually	1 special test.
" "	1903		2 hoppers	Fairbanks	72,000	2		1903	Annually	20 00	Semi-annually	1 special test.
Consolidated	1909	1,750,000	3 hoppers	Fairbanks	96,000	2	1	1909	Annually	36 00	Semi-annually	1 special test.
2nd Unit	1911		3 hoppers	Gurney	120,000	2	1	1911	Annually	36 00	Semi-annually	
Empire	1904	1,750,000	8 hoppers	Fairbanks	96,000	4	4	1904	Annually	96 00	Semi-annually	
Thunder Bay	1908	1,500,000	3 hoppers	Fairbanks	120,000		3	1908	Annually	36 00	Semi-annually	
			3 hoppers	Fairbanks	96,000	3		1908	Annually	36 00	Semi-annually	
Western Terminal	1907	2,850,000	3 hoppers	Fairbanks	96,000	2	1	1907	Annually	36 00	Semi-annually	1 special test.
2nd unit	1914		4 hoppers	Fairbanks	120,000	2	2	1914	Annually	48 00	Semi-annually	
3rd unit	1923		4 hoppers	Fairbanks	120,000	2	2	1923	Annually	48 00	Semi-annually	
Fort William "F"	1913	1,750,000	6 hoppers	Gurney	96,000	6		1913	Annually	72 00	Semi-annually	
			3 hoppers	Gurney	120,000		3	1913	Annually	36 00	Semi-annually	
Western Grain	1915	250,000	2 hoppers	Fairbanks	30,000	1	1	1915	Annually	12 00	Semi-annually	
			1 hopper	Fairbanks	96,000	S.	& R.	1916	Annually	12 00	Semi-annually	1 special test.
Wheat Pool No. 2	1905	300,000	1 hopper	Fairbanks	42,000	1		1905	Annually	8 00	Semi-annually	1 special test.
New Workhouse	1923	325,000	2 hoppers	Fairbanks	120,000	1	1	1923	Annually	24 00	Semi-annually	1 special test.
McCabes	1912	35,000	1 hopper	Fairbanks	12,000	S.	& R.	1912	Annually	3 50	Semi-annually	
Bole Grain Co	1912	20,000	1 hopper	Gurney	12,000	S.	& R.	1912	Annually	3 50	Semi-annually	
			1 platform	B. S. & M	600			1913	Annually	1 00		
			1 automatic	Richardson	180	Bag	ger	1913	Annually	2 55		
National	1916	60,000	1 hopper	Fairbanks	60,000	S.	& R.	1916	Annually	8 00	Semi-annually	1 special test.
			1 platform	B. S. & M	1,200			1918	Annually	1 50		
			1 automatic	Richardson	180	Bag	ger	1918	Annually	2 70		
National—D. & S. Feed	1918	85,000	Track scale	Gurney	200,000			1918	Annually	20 00	Semi-annually	
			1 hopper	Gurney	30,000	S.	& R.	1918	Annually	6 00	Semi-annually	
Union Terminal	1916	1,100,000	2 hoppers	Fairbanks	96,000	1	1	1916	Annually	24 00	Semi-annually	1 special test.
			2 hoppers	Fairbanks	60,000	2		1918	Annually	16 00	Semi-annually	
Electric	1916	1,000,000	3 hoppers	Gurney	120,000	2	1	1916	Annually	36 00	Semi-annually	
			1 hopper	Fairbanks	84,000	1		1926	Annually	12 00	Semi-annually	
Wheat Pool No. 1	1917	1,750,000	2 hoppers	Gurney	120,000	1	1	1917	Annually	24 00	Semi-annually	1 special test.
			1 hopper	Gurney	96,000	1		1917	Annually	12 00	Semi-annually	
Saskatchewan Pool No. 5	1918	2,100,000	4 hoppers	Gurney	120,000	2	2	1918	Annually	48 00	Semi-annually	1 special test.
Eastern Terminal	1918	3,500,000	7 hoppers	Gurney	120,000	4	3	1918	Annually	84 00	Semi-annually	
Ogilvie Feed Mill	1921	180,000	1 hopper	Fairbanks	84,000	S.	& R.	1921	Annually	12 00	Semi-annually	
		56,230,000								1,644 75		

REPORT OF SCALE INSPECTION IN ELEVATORS AT FORT WILLIAM AND PORT ARTHUR, ALSO INTERIOR, YEAR 1928.—*Con.*

Name of Elevator	Date of Construction	Storage	Number of Scales	Make	Capacity	Shipping	Receiving	Date Installed	Inspection Weights and Measures	Fees	Board Inspection No charge	Special Inspections as occasion called for
Private and Hospital—Concluded		Bush.			Lbs.					$ cts.		
Superior	1922	900,000	3 hoppers	Gurney	120,000	2	1	1922	Annually	36 00	Semi-annually	1 special test.
Northwestern	1922	3,000,000	3 hoppers	Gurney	120,000	3	.....	1922	Annually	36 00	Semi-annually	
New Workhouse	1925	.....	3 hoppers	Gurney	120,000	1	2	1925	Annually	36 00	Semi-annually	
Stewarts	1923	2,000,000	5 hoppers	Fairbanks	120,000	3	2	1923	Annually	60 00	Semi-annually	1 special test.
Bawlf	1923	2,350,000	5 hoppers	Fairbanks	120,000	3	2	1923	Annually	60 00	Semi-annually	1 special test.
Reliance	1924	2,450,000	5 hoppers	Fairbanks	120,000	3	2	1924	Annually	60 00	Semi-annually	1 special test.
Patersons "O"	1927	2,500,000	4 hoppers	Gurneys	150,000	2	2	1927	Annually	54 00	Semi-annually	
			1 hopper	Fairbanks	60,000	1	.....	1924	Annually	.....		
United Grain Growers "A"	1927	5,500,000	7 hoppers	Fairbanks	150,000	4	3	1927	Annually	94 50	Semi-annually	
Saskatchewan Pool No. 7	1928	5,900,000	11 hoppers	Gurney	150,000	6	5	1928	Annually	148 50		
Searles	1928	3,000,000	4 hoppers	Fairbanks	150,000	2	2	1928	Annually	54 00		
		83,830,000								2,283 75		
Government Interiors—												
Moose Jaw	1914	3,250,000	6 hoppers	Fairbanks	120,000	3	3	1914	Annually	72 00	Semi-annually	1 special test.
			2 automatic	Fairbanks	180	Bag	gers	1915	Annually	4 60		
			2 platform	Gurney	1,200	.....	.....	1915	Annually	3 00		
Saskatoon	1914	3,250,000	6 hoppers	Gurneys	120,000	3	3	1914	Annually	72 00	Semi-annually	
			2 automatic	Fairbanks	180	Bag	gers	1915	Annually	4 60		
			1 platform	Fairbanks	600	.....	.....	1915	Annually	1 00		
Calgary	1915	2,500,000	6 hoppers	Fairbanks	120,000	3	3	1915	Annually	72 00	Semi-annually	
			1 automatic	Fairbanks	180	Bag	gers	1915	Annually	2.30		
			1 platform	Fairbanks	600	.....	.....	1915	Annually	1 00		
Edmonton	1924	2,500,000	5 hoppers	Gurney	120,000	3	2	1924	Annually	60 00	Semi-annually	
			3 automatics	Richardson	180	Bag	gers	1924	Annually	7 80		
			1 platform	Fairbanks	500	.....	.....	1924	Annually	1 00		
Prince Rupert	1925	1,250,000	5 hoppers	Gurney	120,000	3	2	1925	Annually	60 00	Semi-annually	
Vancouver, B.C.—												
Pacific Terminals (H.C. No. 1)	1916	1,250,000	3 hoppers	Fairbanks	120,000	.....	3	1916	Annually	36 00	Semi-annually	
			3 automatics	Richardson	10,000	3	.....	1916	Annually	54 00	Semi-annually	
			4 automatics	Richardson	180	Bag	gers	1916	Annually	12 60		
			1 platform	Fairbanks	1,000	.....	.....	1922	Annually	1 00		
No.1 Annex	1923	600,000	3 hoppers	Fairbanks	72,000	3	.....	1923	Annually	30 00	Semi-annually	
Vancouver Terminal	1924	2,250,000	5 hoppers	Fairbanks	120,000	2	3	1924	Annually	60 00	Semi-annually	
			1 hopper	Gurney	132,000	1	.....	1925	Annually	13 00	Semi-annually	
Alberta Wheat Pool (H.C. No. 2)	1924	1,750,000	4 hoppers	Gurney	120,000	.....	4	1924	Annually	56 00	Semi-annually	
			6 hoppers	Gurney	72,000	6	.....	1924	Annually	60 00	Semi-annually	
Burrard (U. G. G. Co.)	1923	1,630,000	2 hoppers	Fairbanks	120,000	.....	2	1923	Annually	24 00	Semi-annually	
			2 hoppers	Gurney	60,000	2	.....	1924	Annually	16 00	Semi-annually	
Columbia Grain Co.	1924	100,000	2 hoppers	Fairbanks	60,000	2	.....	1924	Annually	16 00	Semi-annually	
			1 hopper	Fairbanks	120,000	.....	1	1924	Annually	12 00	Semi-annually	
Alberta Pool No. 1	1928	2,400,000	7 hoppers	Fairbanks	120,000	4	3	1928	Annually	84 00		
Midland Pacific	1928	500,000	3 hoppers	Gurney	120,000	1	2	1928	Annually	36 00		
Victoria, B.C.—												
Panama Pacific Grain Co.	1928	1,000,000	1 hopper	Gurney	120,000	.....	1	1928	Annually	12 00		
			2 hoppers	Gurney	72,000	2	.....	1928	Annually	20 00		
Total storage	.....	108,060,000								$ 3,187 65		

CHAPTER V

"A"—REPORT OF LICENSING AND BONDING FOR THE SEASON OF 1927-1928

During the license year of 1927-28, commencing September 1, 1927, and ending August 31, 1928, 254 firms and individuals applied for licenses as required by the provisions of the Canada Grain Act.

Five thousand and ten applications were received, an increase of 341 over the previous season; 9 of the applications were withdrawn for various reasons, and 5,001 licenses were issued.

APPLICATIONS RECEIVED AND LICENSES ISSUED

Kind of License	Applications		Licenses issued
	Received	Withdrawn	
Track buyers	85	1	84
Commission merchants	92	.....	92
Primary grain dealers	3	.....	3
Public terminal elevators	11	.....	11
Private elevators	81	1	80
Public elevators	18	.....	18
Manufacturing elevators	16	.....	16
Elevator space	1	.....	1
Country elevators	4,703	7	4,696
	5,010	9	5,001

At August 31, 1928, there were 4,856 elevators in the Western Inspection Division, with a total storage capacity of 265,193,350 bushels, an increase since August 31, 1927, of 309 elevators, with increased storage of 21,307,150 bushels.

ELEVATOR STORAGE CAPACITY—WESTERN INSPECTION DIVISION—AS AT AUGUST 31, 1928.

Kind of Elevator	Number of Elevators	Capacity
		Bushels
Country elevators	4,751	156,947,200
Public terminal elevators	10	39,025,000
Private elevators	78	66,735,000
Manufacturing elevators	17	2,486,150
	4,856	265,193,350

The records of the board show that 78 of the 4,856 country elevators, with an approximate storage capacity of 2,340,000 were not in operation at any time during the season.

Of the 10 public terminal elevators 5 are located at the head of the lakes, with total storage capacity of 24,925,000 bushels; 4 at interior points, capacity 12,000,000 bushels; and 1 at Vancouver, with storage capacity of 2,100,000 bushels.

PUBLIC TERMINAL AND PRIVATE ELEVATORS IN THE WESTERN INSPECTION DIVISION, AS AT AUGUST 31, 1928

Location	Public Terminal Elevators		Private Elevators	
	No.	Capacity	No.	Capacity
Fort William	2	7,750,000	15	25,290,000
Port Arthur	3	17,175,000	12	22,325,000
	5	24,925,000	27	47,615,000
Interior Points	4	12,000,000	39	11,725,000
Pacific coast	1	2,100,000	12	7,395,000
Totals	10	39,025,000	78	66,735,000

In the Eastern Inspection Division, the only elevators under the jurisdiction of the board are the public elevators, of which there are 27, with a total storage capacity of 47,610,000. Fifteen of these elevators are located in Ontario, with capacity of 28,600,000 bushels; 7 at Montreal and Quebec, storage 15,310,000 bushels; and 5 at the Atlantic coast, in the Maritime Provinces, with storage capacity of 3,700,000 bushels.

The appended statements shows:—

Licenses issued during the past 17 years.

Comparative summary of elevators, together with storage capacities, from 1911-12 to 1927-28.

Summary of elevators in the Western and Eastern Inspection Divisions, as at August 31, 1928.

STATEMENT SHOWING NUMBER AND KIND OF LICENSES ISSUED DURING THE SEASONS 1911-12 TO 1927-28

Kind	1927-1928	1926-1927	1925-1926	1924-1925	1923-1924	1922-1923	1921-1922	1920-1921	1919-1920	1918-1919	1917-1918	1916-1917	1915-1916	1914-1915	1913-1914	1912-1913	1911-1912
Country elevators and warehouses	4,696	4,349	4,236	4,074	4,054	3,828	3,668	3,704	3,146	3,322	3,577	3,257	3,013	2,636	2,552	2,267	1,972
Public terminal elevators	11	14	21	11	9	12	11	12	17	17	17	15	13	13	14		
Private elevators	80	67	64	63	60	32	29	25	17	18	20	21	19	18	13	*23	34*
Public elevators	18	17	17	11	10	10	13	11	16	16	18	16	18	18	20		
Manufacturing elevators	16	10	10	12	11	9	14	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Elevator space	1	3	3	2	2	2	.....	.....	.....	.....	7	7	10	7	3	19	58
Track buyers	84	88	95	104	109	113	132	143	131	130	156	211	195	140	137	146	123
Commission merchants	92	95	94	94	102	100	110	117	114	117	126	138	111	92	91	91	84
Primary grain dealers	3	3	3	3	4	6	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total number issued	5,001	4,646	4,543	4,374	4,361	4,112	3,980	4,014	3,441	3,620	3,921	3,666	3,379	2,924	2,830	2,546	2,271

* Licensed as Terminal elevators.

COMPARATIVE SUMMARY OF ELEVATORS FOR THE PAST SEVENTEEN YEARS, (AS AT DECEMBER 1 EACH YEAR)

License Year	Stations	Elevators	Warehouses	Capacity
1911-12	937	2,037	31	108,649,000
1912-13	1,048	2,319	37	127,224,550
1913-14	1,217	2,607	24	154,765,000
1914-15	1,247	2,813	28	168,624,000
1915-16	1,334	3,059	19	180,988,000
1916-17	1,400	3,360	.....	193,844,000
1917-18	1,463	3,694	.....	211,591,800
1918-19	1,484	3,777	.....	221,279,964
1919-20	1,511	3,797	.....	226,256,970
1920-21	1,542	3,855	.....	231,213,620
1921-22	1,559	3,924	.....	231,633,420
1922-23	1,578	4,020	.....	238,107,420
1923-24	1,620	4,169	.....	251,194,620
1924-25	1,764	4,324	.....	269,900,620
1925-26	1,745	4,416	.....	281,746,560
1926-27	1,798	4,558	.....	284,818,200
1927-28	1,852	4,823	.....	310,832,200

SUMMARY OF ELEVATORS AND WAREHOUSES IN THE EASTERN AND WESTERN INSPECTION DIVISIONS AS AT AUGUST 31, 1928

Province	Stations	Elevators	Capacity
			Bushels
MANITOBA—			
Country elevators	382	690	21,661,300
Manufacturers elevators	2	6	1,424,000
Private elevators	2 (4)	14	4,055,000
Total	386	710	27,140,300
SASKATCHEWAN—			
Country elevators	954	2,802	88,297,900
Manufacturers elevators	1 (2)	2	28,000
Public terminal elevators	(2)	2	7,000,000
Private elevators	1 (3)	4	2,510,000
Total	956	2,810	97,835,900
ALBERTA—			
Country elevators	497	1,256	46,909,000
Manufacturers elevators	1 (2)	3	720,000
Public terminal elevators	(2)	2	5,000,000
Private elevators	1 (4)	18	3,410,000
Total	499	1,279	56,039,000
BRITISH COLUMBIA—			
Country elevators	2	2	39,000
Manufacturers elevators	3	5	129,150
Public terminal elevators	(1)	1	2,100,000
Private elevators	1 (3)	12	7,395,000
Total	6	20	9,663,150
ONTARIO			
Country elevators	1	1	40,000
Manufacturers elevators	1	1	185,000
Public terminal elevators	(2)	5	24,925,000
Private elevators	2 (4)	30	49,365,000
Total	4	37	74,515,000
WESTERN DIVISION	1,851	4,856	265,193,350
ONTARIO—Public elevators	11	15	28,600,000
QUEBEC—Public elevators	2	7	15,310,000
NEW BRUNSWICK—Public elevators	1	3	2,200,000
NOVA SCOTIA—Public elevators	1	2	1,500,000
EASTERN DIVISION	15	27	47,610,000
Grand total	1,866	4,883	312,803,350

"B"—LOADING PLATFORMS

During the season of 1927-28 the board dealt with a number of petitions for the erection and extension of grain loading platforms.

At May 1, 1928, there were loading platforms at 2,273 points in Western Canada, at which farmers could load grain, without putting such grain through country elevators, into 5,574 cars simultaneously.

SUMMARIZED STATEMENT OF GRAIN LOADING PLATFORMS IN WESTERN CANADA (AS AT MAY 1, 1928)

Province	Number of Stations	Car Capacity
Manitoba	633	1,707
Saskatchewan	1,028	2,604
Alberta	582	1,200
British Columbia	22	47
Ontario	8	16
	2,273	5,574

"C"—CARS OUT OF TURN

By virtue of section 192 of the Canada Grain Act, the board is accorded certain discretionary powers in connection with the supplying of cars for the shipment of grain at country points. During the year 1927-28 the Board ordered one hundred and thirty (130) cars to be supplied out of turn for the relief of elevators in danger of collapse, for the shipment of seed grain, for grain urgently required for feeding and milling purposes, and for grain out of condition or insufficiently housed.

"D"—COMPLAINTS

During the year ending August 31, 1928, the board dealt with four hundred and thirty-eight (438) complaints relating to inspection and weighing of grain, shipments ex country elevators, etc.

CHAPTER VI

MAXIMUM TARIFF OF PUBLIC TERMINAL ELEVATOR CHARGES AT FORT WILLIAM AND PORT ARTHUR TERMINALS

For the Year Ending August 31, 1929. Effective September 1, 1928

Subject to the capacity of the elevator and the nature of its equipment, shipments will be received upon the following terms and conditions, and under the provisions of the Canada Grain Act, 1925.

Elevation Charges

On straight grade, tough, damp, or wet grain, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days: flax, 2 cents per bushel; rye, 1½ cents per bushel; wheat, oats and barley, 1¼ cents per bushel.

All tough, damp, wet condemned, heating, heated or fireburnt grain may always be refused. If received and stored, it will be only at the owner's risk of deterioration. All damp grain and tough and damp flax will be dried without notice as soon after unloading as facilities will permit.

On mixed grains handled as mixtures, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, two cents (2c.) per hundred pounds.

On screenings, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, three cents (3c.) per hundred pounds.

Storage Charges

On straight grade and tough grain, not otherwise specified, including insurance against fire for each succeeding day or part thereof after the first fifteen days, one-thirtieth of one cent (1/30c.) per bushel.

On mixed grain handled as mixtures, storage, including insurance against fire for each succeeding day or part thereof after the first fifteen days, two-thirtieths of one cent (2/30c.) per hundred pounds.

On screenings, storage, including insurance against fire for each succeeding day or part thereof after the first fifteen days, one-tenth of one cent (1/10c.) per hundred pounds.

Screenings

On wheat carrying a dockage of three per cent (3 per cent) or more, after deducting one-half of one per cent (½ per cent) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On oats and barley carrying a dockage of five per cent (5%) or more, after deducting one half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On rye and flax carrying a dockage of five per cent (5%) or more, after deducting one per cent (1%) of the gross weight of the car to cover outward dockage and waste in cleaning, a return will be made for the balance of the screenings.

If disposition of screenings covered by outstanding returns is not received within thirty (30) days from the date of unloading, they may be disposed of for account of whom it may concern.

The holder of warehouse receipts or shut-outs covering dockage shall be entitled to receive such average quality of screenings as shall be determined by the Inspection Department in accordance with sample tests which shall be made in such manner and when deemed necessary by said department.

Cleaning Charges

On wheat, for removal of dockage, other than commercial grain, there will be cleaning charges as follows:—

Dockage under 3 per cent, no charge.
Dockage 3 per cent to 5 per cent inclusive, one-half cent (½c.) per bushel.
Dockage 5½ per cent to 10 per cent, one cent (1c.) per bushel.
Dockage over 10 per cent, one and one-half cent (1½c.) per bushel.

On wheat carrying a return of other grain of commercial value, except flax, computed on gross weight of car, an additional separating charge of one cent (1c.) per bushel.

On wheat carrying a return of flax, an additional separating charge computed on gross weight of car, two cents (2c.) per bushel.

On oats, barley and rye, for removal of dockage, other than commercial grain, there will be cleaning charges as follows:—

On all cars carrying a dockage of—

Less than 5 per cent, no charge.
Five per cent to 10 per cent inclusive, one cent (1c.) per bushel.
Over 10 per cent, one and one-half cents (1½c.) per bushel.

On oats, barley and rye carrying a return of flax computed on gross weight of car, an additional separating charge of two cents (2c.) per bushel.

Flax cleaned from any other grain containing broken particles that cannot be separated, shall be classified as "Flax and Broken Wheat."

On flax, for removal of dockage, other than commercial grain, there will be cleaning charges as follows:—

On flax carrying a dockage of—

Less than 5 per cent, no charge.
Five per cent to 10 per cent inclusive, one and one-half cents (1½c.) per bushel.
Over 10 per cent, two cents (2c.) per bushel.

On flax carrying a return of other grain of commercial value, computed on gross weight of car, an additional separating charge of one cent (1c.) per bushel.

Drying Charges

On tough grain, three cents (3c.) per bushel.
On damp or wet grain, five cents (5c.) per bushel.

Allowance for Invisible Loss and Shrinkage on all Cars

Wheat	30	pounds per car.
Oats	50	"
Barley	50	"
Mixed Grain	50	"
Rye	56	"
Flax	56	"

All Charges

All charges for cleaning, drying or other treatment will be computed on gross weight of car, for elevation and storage on net weights. All charges accruing after issue of initial completed out-turn and expense bill will follow the grain. All charges whatsoever must be paid before shipment.

Bulkheads

On bulkheads for their removal and other additional expense in handling and unloading car, five dollars ($5) per bulkhead.

Unloading Sacked Grain

A charge of five cents (5c.) per sack will be made for unloading all sacked grain.

Preparing Cars for Loading

When paper is used in preparing cars, there will be a charge of four dollars ($4) for each car.

Unspecified Grain

Unspecified grain will only be received, stored and treated subject to special charges to be agreed upon at the time, subject to the approval of the Board of Grain Commissioners.

Upon the application to the board of any public terminal elevator, the above tariff may be reduced insofar as that elevator is concerned, but such reduced charges must apply to all grain received at such elevator during the crop year 1928-29.

This tariff of rates is published by the Board of Grain Commissioners for Canada in accordance with section 127 of the Canada Grain Act and shall become effective as from September 1, 1928.

BOARD OF GRAIN COMMISSIONERS FOR CANADA,

F. J. Rathbone,
Secretary.

Fort William, Ont., September 4, 1928.

MAXIMUM TARIFF CHARGES—GOVERNMENT INTERIOR TERMINAL ELEVATORS AT SASKATOON, MOOSE JAW, CALGARY AND EDMONTON

For the Year Ending August 31, 1929, Effective September 1, 1928

Subject to the capacity of the elevator and the nature of its equipment, shipments will be received upon the following terms and conditions, and under the provisions of the Canada Grain Act, 1925, and amendments thereto.

Elevation Charges

On straight grade, tough, damp or wet grain, not otherwise specified, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, one cent (1c.) per bushel.

All tough, damp, wet, condemned, heating, heated or fire-burnt grain may always be refused. If received and stored, it will be only at the owner's risk of deterioration and under special contract. Except that from November first

to April first tough grain will be received and stored under the terms and conditions applying to straight grade grain as provided in Sections 130 to 139 Canada Grain Act.

On mixed grains handled as mixtures, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, one and one-half cents (1½c.) per hundred pounds.

On screenings, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, three cents (3c.) per hundred pounds.

On grain unloaded from wagons, or teams, receiving, elevating, cleaning, shipping, insurance against fire, storage for the first fifteen days, one and one-half cents (1½c.) per bushel.

Storage Charges

On straight grade and tough grain, not otherwise specified, including insurance against fire for each succeeding day or part thereof, after the first fifteen days, one-sixtieth of one cent (1/60c.) per bushel.

On mixed grain handled as mixtures, storage, including insurance against fire for each succeeding day or part thereof, after the first fifteen days, one-thirtieth of one cent (1/30c.) per hundred pounds.

On screenings, storage, including insurance against fire for each succeeding day or part thereof, after the first fifteen days, one-tenth of one cent (1/10c.) per hundred pounds.

Screenings

On wheat carrying a dockage of three per cent (3%) or more, after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On oats and barley carrying a dockage of five per cent (5%) or more, after deducting one-half of one per cent (½%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On rye and flax carrying a dockage of five per cent (5%) or more, after deducting one per cent (1%) of the gross weight of the car to cover outward dockage and waste in cleaning, a return will be made for the balance of the screenings.

If disposition of screenings covered by outstanding returns is not received within thirty (30) days from the date of unloading, they may be disposed of for account of whom it may concern.

The holder of warehouse receipts or shut-outs covering dockage shall be entitled to receive such average quality of screenings as shall be determined by the Inspection Department in accordance with sample tests which shall be made in such manner and when deemed necessary by said department.

Cleaning Charges

On wheat, when the dockage contains no other grain of commercial value, there will be cleaning charges as follows:—

Dockage under 3 per cent, no charge.
Dockage 3 per cent to 5 per cent inclusive, ½c per bushel.
Dockage 5½ per cent to 10 per cent inclusive, 1c. per bushel.
Over 10 per cent, 1½c. per bushel.

On wheat carrying a return of other grain of commercial value, except flax, computed on gross weight of car, an additional separating charge of one cent (1c.) per bushel.

On wheat carrying a return of flax, an additional separation charge computed on gross weight of car, two cents (2c.) per bushel.

On oats, barley and rye, when the dockage contains no other grain of commercial value, there will be cleaning charges as follows:—

On all cars carrying a dockage of,—

Less than 5 per cent, no charge.
5 per cent to 10 per cent inclusive, 1c. per bushel.
Over 10 per cent, 1½c. per bushel.

On oats, barley and rye carrying a return of flax, computed on gross weight of car, an additional separating charge of two cents (2c.) per bushel.

Flax cleaned from any other grain containing broken particles that cannot be separated shall be classified as flax and broken wheat.

On flax, when the dockage contains no other grain of commercial value, there will be the following cleaning charges:—

On flax carrying a dockage of,—

Less than 5 per cent, no charge.
From 5 per cent to 10 per cent inclusive, 1½c. per bushel.
Over 10 per cent, 2c. per bushel.

On flax carrying a return of other grain of commercial value, computed on gross weight of car, an additional separating charge of one cent (1c.) per bushel.

Drying Charges

On tough grain, three cents (3c.) per bushel.
On damp or wet grain, five cents (5c.) per bushel.

Allowance for Invisible Loss and Shrinkage

On all grain received, deductions from the gross weight of each car to cover invisible loss and shrinkage in handling will be made as follows:—

Wheat	30	Pounds
Oats	50	"
Barley	50	"
Flax	56	"
Rye	56	"
Mixed grain	50	"

All Charges

All charges for cleaning, drying or other treatments will be computed on gross weight, for elevation and storage on net weights, all charges accruing after issue of initial completed outturn and expense bill will follow the grain. All charges whatsoever must be paid before shipment.

Bulkheads

On bulkheads for their removal and other additional expense in handling and unloading car, five dollars ($5) for each bulkhead.

Unloading Sacked Grain

A charge of five cents (5c.) per sack will be made for unloading all sacked grain.

Sacking Grain

Sacking grain and loading to cars or other vehicles will be subject to rate agreed upon.

Preparing Cars for Loading

When paper is used in preparing cars there will be a charge of four dollars ($4) for each car.

Unspecified Grain

Unspecified grain will only be received stored and treated subject to special charges to be agreed upon at the time subject to the approval of the Board of Grain Commissioners.

This tariff of rates is published by the Board of Grain Commissioners for Canada in accordance with section 127 of the Canada Grain Act and shall become effective as from September 1, 1927.

BOARD OF GRAIN COMMISSIONERS FOR CANADA.

F. J. Rathbone,
Secretary.

Fort William, Ont., September 16, 1928.

COUNTRY ELEVATORS

Maximum Tariff of Charges for Licensed Country Elevators for the Period Ending August 31, 1929. Effective September 1, 1928

Subject to the capacity of the elevator and the nature of the construction, all grain tendered must be taken into store upon following terms and conditions, and under the provisions of The Canada Grain Act, 1925, and amendments thereto.

Maximum Rates—Special Bin Grain receiving, elevating, spouting, insurance against fire, storing for the first fifteen (15) days and putting into cars on track; no elevator shall charge more than three cents (3c.) per bushel for flax, two and one-half cents (2½c.) per bushel for wheat, barley and rye, and one and three-quarter cents (1¾c.) per bushel for oats.

Graded Storage and Subject to Grade and Dockage Grain.—Receiving, elevating, spouting, insurance against fire, storing for the first fifteen days and putting into cars on track: no elevator shall charge more than three cents (3c.) per bushel for flax, two cents (2c.) per bushel for wheat, barley and rye and one and three-quarter cents (1¾c.) per bushel for oats. Storage not otherwise provided, including insurance against fire, for each succeeding day after the first fifteen (15) days shall not exceed one-thirtieth of one cent (1/30c.) per bushel.

Cleaning.—The rate for cleaning grain shall be mutually agreed upon by the elevator operator and the owner of the grain according to the nature of its dockage, but in no case shall the rate exceed a maximum of two cents (2c.) per bushel.

Shrinkage.—No elevator shall take more than the allowance for shrinkage, waste in handling, storing and transmitting the grain to a terminal than the weight in pounds set forth in the shrinkage table as authorized by the Governor in Council and declared to form part of the tariff and Rules and Regulations for country elevators.

All shrinkage on tough and damp grain shall not be more than double the allowance as set forth in the aforesaid schedule.

Such shrinkage table shall be placed conspicuously in all licensed country elevators for free inspection of the public.

Dockage on Cash or Stored Grain.—No elevator shall take a greater dockage than that shown by a proper test over a number ten sieve, except where the grains contain foreign grain or seeds which cannot be taken out by a number ten sieve.

Every elevator must be equipped with the necessary sieves and scales for making proper tests, and the elevator operator must make the test in the presence of the owner of the grain when requested.

General.—When tough, damp or wet grain is taken into store it shall be at the owner's risk, and the elevator operator shall have the right to ship it immediately to a terminal elevator for treatment.

All tough, damp or wet grain, containing an excessive amount of snow and ice, may be handled subject to agreement between the owner of the grain and the operator.

Rules and Regulations for Country Elevators

1. The owner or operator of a country elevator shall post in the elevator in a conspicuous place, a diagram to a scale of not less than one-half inch to one foot, showing the location and numbers of the several bins in such elevator.

2. In shipping or delivering any grain stored in a country elevator, the net weight on the ticket or tickets shall be final, unless an investigation by the Board of Grain Commissioners shows reason for the contrary. The shipper to be paid in case of short shipment up to the amount of his or her ticket or tickets for the full billing capacity of the car, at the same price as the car was disposed of.

3. All shipping bills for grain shipped through an elevator shall be made out by the elevator agent, and he shall advise such parties as the owner may instruct.

4. The owner of grain in an elevator wishing such grain shipped to any point other than a terminal point, or where Government weights cannot be obtained, the owner of the grain must then accept the elevator weights at the shipping point as final unless it is proved that the shipping weights are not correct. Provided, moreover, the owner of the grain can always demand an affidavit as to the actual grain shipped and delivered from the elevator operator and receiver of said grain respectively.

5. No owner or operator of a country elevator or warehouse shall sell, assign, mortgage, pledge, or hypothecate any grain stored in such elevator or warehouse, for which storage tickets have been issued, and the owner or operator may be required by the Board to produce at any time proper registered warehouse receipts or bills of lading for such grain as has been shipped from the country elevator or warehouse, and for which there is still outstanding storage tickets.

6. No license will be granted for the operation of any country elevator the agent or buyer of which is subject to a shortage bond, and in the event of a shortage bond being entered into after license has been granted, such license will be subject to immediate cancellation.

Rules and Regulations for Handling Grain for which Special Bin or Subject to Grade and Dockage Tickets have been Issued, or where there is Disagreement as to Grade and Dockage

1. The ticket or tickets issued where there is a disagreement as to grade and dockage or where grain has been received subject to inspector's grade and dockage must have incorporated thereon at the time of issue the grade offered by the elevator owner or operator to the owner of the grain and the following words: "Subject to Inspector's Grade and Dockage."

2. The owner of the grain can only demand the quantity that the storage ticket or tickets call for.

3. In case there is a dispute as to the weighing accuracy of the receiving scales, it shall be incumbent upon the owner of the elevator to prove that the scales are weighing accurately.

4. In the case of special bin or subject to grade and dockage grain a proper sample must be drawn from each load by the elevator operator at the time of delivery, in the presence of the party delivering same, and such sample must be drawn satisfactorily to both the deliverer and the operator, and all such samples must be placed in a suitable receptacle satisfactory to the Board of Grain Commissioners, and must be properly mixed in such receptacle. The receptacle shall be provided by the warehouseman and the sample shall be placed therein in the presence of the owner. The receptacle shall be secured by padlock which the owner of the grain shall provide, and the key of which he shall retain. The warehouseman shall be the custodian of the receptacle and of the sample.

5. In the case of subject to grade and dockage grain, a fair and proper sample of at least two quarts shall then be drawn in the presence of the owner of the grain from such receptacle, and forwarded in a suitable receptacle properly tied and sealed, and marked "Subject to Inspector's Grade and Dockage" to the Chief Inspector of Grain, and shall be accompanied by a request in writing of either or both parties aforesaid that the Chief Inspector will examine the sample and report on the grade and dockage the grain is in his opinion entitled to, and would receive if shipped to a terminal point and subjected to an official inspection.

6. After receiving the inspector's judgment, showing the grade and dockage the elevator operator shall in the case of cash tickets make settlement on the basis of the grade and dockage given by the Chief Inspector, and shall, in the case of subject to grade and dockage tickets, issue graded storage tickets showing the grade and dockage as given by the Chief Inspector for the full amount of grain so taken into store, such graded storage tickets to bear the same date as the original subject to grade and dockage tickets, after which the grain shall be subject to the rules and regulations covering graded stored grain.

7. Notwithstanding any regulation provided in paragraphs five and six of these regulations, if the identity of the grain has been preserved even though subject to grade and dockage tickets may have been issued therefor, if agreeable to the owner, the grain then may be handled in accordance with the provisions of the Canada Grain Act and rules and regulations relating to the special binning of grain in country elevators.

8. At the time of delivery of any grain where a ticket of this kind is being used, and it is agreed upon by the owner of the grain and the elevator operator that the grain is tough, damp or wet, and the elevator operator marks such ticket or tickets: "Out of condition, tough, damp or wet," then whatever grade such sample may receive from the Chief Inspector, it will still grade "tough, damp or wet."

9. If the elevator operator fails at any time to draw and preserve such sample in the manner stated herein, the owner or operator must account to the owner of the grain for the grade designated by the said owner.

10. When submitting samples of grain to the Chief Inspector, elevator operators must have such samples properly marked either "Special Bin" or "Subject to Inspector's Grade and Dockage" as the case may be.

Approved by Board of Grain Commissioners for Canada.

F. J. RATHBONE,
Secretary.

Authorized by Order in Council P.C. 1601.
Dated at Ottawa, August 30, 1928.

Shrinkage Table

Wheat, Flax and Rye				Oats			Barley		
Gross bushels	Gross weight in pounds		Shrinkage allowance	Gross bushels	Gross weight in pounds	Shrinkage allowance	Gross bushels	Gross weight in pounds	Shrinkage allowance
	lbs.	lbs.	lbs.		lbs.	lbs.		lbs.	lbs.
Up to and including 25 bushels...	1,500	1,400	5	Up to and including 25 bushels.....	850	5	Up to and including 25 bushels.....	1,200	5
Over 25 bushels. to 42 " ..	1,500 2,520	1,400 2,352	10	Over 25 bushels.. to 42 " ..	850 1,428	6	Over 25 bushels.. to 42 " ..	1,200 2,016	8
Over 42 " . to 58 " .	2,520 3,480	2,352 3,248	15	Over 42 " to 58 " ..	1,428 1,972	8	Over 42 " .. to 58 " ..	2,016 2,784	12
Over 58 " . to 75 " .	3,480 4,500	3,248 4,200	20	Over 58 " .. to 75 " ..	1,972 2,550	11	Over 58 " .. to 75 " ..	2,784 3,600	16
Over 75 " . to 92 " .	4,500 5,520	4,200 5,152	25	Over 75 " .. to 92 " ..	2,550 3,128	14	Over 75 " .. to 92 " ..	3,600 4,416	20
Over 92 " . to 108 " .	5,520 6,480	5,152 6,048	30	Over 92 " .. to 108 " ..	3,128 3,672	17	Over 92 " .. to 108 " ..	4,416 5,184	24
Over 108 " . to 125 " .	6,480 7,500	6,048 7,000	35	Over 108 " .. to 125 " ..	3,672 4,250	20	Over 108 " .. to 125 "	5,184 6,000	28
Over 125 " . to 142 " .	7,500 8,520	7,000 7,952	40	Over 125 " .. to 142 " ..	4,250 4,828	23	Over 125 " .. to 142 " ..	6,000 6,816	32
Over 142 " . to 158 " .	8,520 9,480	7,952 8,848	45	Over 142 " .. to 158 " ..	4,828 5,372	26	Over 142 " .. to 158 " ..	6,816 7,584	36

Shrinkage.—No elevator shall take more than the allowance for shrinkage, waste in handling, storing and transmitting the grain to a terminal than the weight in pounds set forth in this shrinkage table as authorized by the Governor in Council and declared to form part of the tariff and Rules and Regulations for country elevators. All shrinkage on tough and damp grain shall not be more than double the allowance as set forth in this schedule. This shrinkage table shall be placed conspicuously in all licensed country elevators for free inspection of the public.

The above Table applies to Cash, Special Binned and stored to grade grain.

Approved by Board of Grain Commissioners for Canada,

F. J. RATHBONE,
Secretary.

Authorized by Order in Council, P.C. 1601—Dated at Ottawa, August 30, 1928.

MAXIMUM TARIFF OF PUBLIC TERMINAL ELEVATOR CHARGES AT VANCOUVER, BRITISH COLUMBIA

For the Year Ending August 31, 1929. Effective September 1, 1928

Subject to the capacity of the elevator and the nature of its equipment, shipments will be received upon the following terms and conditions and under the provisions of the Canada Grain Act, 1925, and amendments thereto:—

Maximum Elevation Charges

On straight grade, tough, damp or wet grain, not otherwise specified, receiving, elevating, shipping, storing and insurance against fire, for the first fifteen days, one and one-quarter cents (1¼c.) per bushel.

All tough, damp, wet, condemned, heating, heated or fire-burnt grain may always be refused, if received and stored it will be only at the owner's risk of deterioration and under special contract, except that tough grain will be received and stored under the terms and conditions applied to straight grade grain as provided in the Canada Grain Act and provisions included in the special provisions made for the port of Vancouver. (*See* Canada Grain Act, 1925, and amendments thereto.)

On mixed grains, handled as mixtures, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, two cents (2c.) per hundred pounds.

On screenings, receiving, elevating, shipping, storing and insurance against fire for the first fifteen days, three cents (3c.) per hundred pounds.

Storage Charges

On straight grade and tough grain, not otherwise specified, including insurance against fire, for each succeeding day or part thereof, after the first fifteen days, one-thirtieth of one cent ($\frac{1}{30}$c.) per bushel.

On mixed grain handled as mixtures, storage, including insurance against fire, for each succeeding day or part thereof, after the first fifteen days, two-thirtieths of one cent ($\frac{2}{30}$c.) per hundred pounds.

On screenings, storage, including insurance against fire, for each succeeding day or part thereof, after the first fifteen days, one-tenth of one cent ($\frac{1}{10}$c.) per hundred pounds.

Screenings

On wheat carrying a dockage of three per cent (3%) or more, after deducting one-half of one per cent ($\frac{1}{2}$%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On oats and barley carrying a dockage of five per cent (5%) or more, after deducting one-half of one per cent ($\frac{1}{2}$%) of the gross weight of the car for waste, a return will be made for the balance of the screenings.

On rye and flax carrying a dockage of five per cent (5%) or more, after deducting one per cent (1%) of the gross weight of the car to cover outward dockage and waste in cleaning, a return will be made for the balance of the screenings.

If disposition of screenings covered by outstanding returns is not received within thirty (30) days from the date of unloading; they may be disposed of for account of whom it may concern.

The holder of warehouse receipts of shut-outs covering dockage shall be entitled to receive such average quality of screenings as shall be determined by the Inspection Department in accordance with sample tests which shall be made in such manner and when deemed necessary by said Department.

Cleaning Charges

On wheat, when the dockage contains no other grains of commercial value, there will be cleaning charges as follows:—

Dockage under 3 per cent, no charge.

Dockage 3 per cent to 5 per cent inclusive, one-half cent ($\frac{1}{2}$c.) per bushel.

Dockage 5$\frac{1}{2}$ per cent to 10 per cent, one cent (1c.) per bushel.

Dockage above 10 per cent, one and one-half cents (1$\frac{1}{2}$c.) per bushel.

On wheat carrying a return of other grain of commercial value, except flax, computed on gross weight of car, an additional separating charge of one cent (1c.) per bushel.

On wheat carrying a return of flax, an additional separating charge computed on gross weight of car, two cents (2c.) per bushel.

On oats, barley and rye, when the dockage contains no other grain of commercial value, there will be cleaning charges as follows:—

On all cars carrying a dockage of:—

Less than 5 per cent, no charge.

Five per cent to 10 per cent inclusive, one cent (1c.) per bushel.

Over 10 per cent, one and one-half cents (1½c.) per bushel.

On oats, barley and rye carrying a return of flax, computed on gross weight of car, an additional separating charge of two cents (2c.) per bushel.

Flax cleaned from any other grain containing broken particles that cannot be separated, shall be classified as "Flax and Broken Wheat."

On flax when the dockage contains no other grain of commercial value, there will be the following cleaning charges:—

On flax carrying a dockage of:—

Less than 5 per cent, no charge.

From 5 per cent to 10 per cent inclusive, one and one-half cents (1½c.) per bushel.

Over 10 per cent, two cents (2c.) per bushel.

On flax carrying a return of other grains of commercial value, computed on gross weight of car, an additional separating charge of one cent (1c.) per bushel.

Drying Charges

On tough grain, three cents (3c.) per bushel.

On damp or wet grain, five cents (5c.) per bushel.

Allowance for invisible loss and shrinkage on all cars as follows:—

Wheat	30	pounds per car.
Oats	50	"
Barley	50	"
Mixed grain	50	"
Rye	56	"
Flax	56	"

All Charges

All charges for cleaning, drying or other treatment will be computed on gross weight of car; for elevation and storage, on net weights. All charges accruing after issue of initial completed outturn and expense bill will follow the grain. All charges, whatsoever, must be paid before shipment.

Bulkheads

On bulkheads for their removal or installation and other additional expense in handling and unloading cars, $5 for each bulkhead.

Unloading Sacked Grain

A charge of five cents (5c.) per sack will be made for unloading all sacked grain.

Sacking Grain

For sacking grain the following charges will be made:—

1½ per bushel on sacks not exceeding 125 pounds

2 c. per bushel on sacks not exceeding 160 pounds

2½c. per bushel on sacks not exceeding 220 pounds

For double sacking one cent (1c.) per sack in addition to above.

For sacking screenings a charge of ten cents (10c.) a sack for sacking will be made.

Sacking of screenings will be done only when conditions warrant it, and the superintendents of such terminal elevators will be the sole judge as to this.

Sacks and twine to be furnished by shipper or supplied at his expense. In case of machine sewing, one-half cent (½c.) per sack will be charged for twine.

Stencilling

A charge of one-half cent (½c.) per sack will be made for stencilling.

Preparing Cars for Loading

When paper is used in preparing cars, there will be a charge of four dollars ($4) for each car.

Unspecified Grain

Unspecified grain will only be received, stored and treated subject to special charges to be agreed upon at the time, subject to the approval of the Board of Grain Commissioners.

This tariff of rates is published by the Board of Grain Commissioners for Canada in accordance with section 127 of the Canada Grain Act and shall become effective as from September 1, 1928.

BOARD OF GRAIN COMMISSIONERS FOR CANADA.

F. J. Rathbone,
Secretary.

Fort William, Ont., September 4, 1928.

CHAPTER VII

Summary of Annual Weigh-up of Grain in Public Terminal Elevators, 1928

Elevator Company	Wheat		Oats		Barley		Flaxseed		Rye		Mixed Grain	
	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit	Surplus	Deficit
	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Grand Trunk Pacific Terminal Elevator Co.	6,173-50	.....	.....	1,806-16	.....	2,562-14	2,210-43	.....	.....	10,105-32	39,300	.....
Ogilvie Flour Mills Co.	26,093-20	.....	3,997-20	.....	6,541-02	.....	2-08	.....	3,385-19	.....	48,660	.....
Saskatchewan Pool Terminal No. 4	26,692-50	.....	11,247-22	.....	3,603-13	.....	1,257-00	.....	1,546-05	.....	.....	204,037
Saskatchewan Pool Terminal No. 6	.....	45,461-50	14,629-24	.....	2,385-31	.....	209-09	.....	.....	5,533-03	.....	379,530
Canadian Government Elevators	1,670-20	.....	10,142-08	.....	5,335-37	.....	1,112-35	.....	111-36	.....	.....	72,010
Pacific Terminal Co., Vancouver	15,087-40	.....	1,737-02	.....	206-42	.....	.....	.....	1,896-10	.....	.....	.....
Totals	75,718-00	45,461-50	41,754-08	1,806-16	18,072-29	2,562-14	4,791-39	.....	6,939-14	15,638-35	87,960	655,577
Total net... Surplus or Deficit	30,256-10		39,947-26		15,510-15		4,791-39		.....		.....	
Total net... Surplus or Deficit	.....		.....		.....		.....		8,699-21		567,617	

CHAPTER VIII

Sessions Held by the Board During Crop Year 1927-28

Date	Place	Subject matter
1927		
Sept. 6	Winnipeg, Man.	Investigation of complaints and routine matters.
" 21	Ottawa, Ont.	Conference with Hon. Jas. Malcolm, Minister of Trade and Commerce, Hon. W. R. Motherwell and Hon. Chas. A. Dunning, *re* inspection of grain at interior terminal points.
" 23	Montreal, Que.	Meeting representatives of the grain trade for discussion of matter relating to the handling and inspection of grain passing through the port of Montreal.
" 24	Montreal, Que.	Conference with the officials of the Montreal Harbour Commissioners relating to the handling of grain passing through the port of Montreal.
Oct. 5	Winnipeg, Man.	Investigation of complaints and routine matters.
" 17	Winnipeg, Man.	Investigation of complaints and routine matters.
" 17	Winnipeg, Man.	Meeting with the Grain Committee of the National Research Council.
" 18	Winnipeg, Man.	Meeting with representatives of the grain trade for the purpose of discussing a resolution passed by the United Farmers of Manitoba regarding the re-inspection of "Inspect Cars."
" 19	Winnipeg, Man.	Meeting with the Grain Committee of the National Research Council and representatives of the grain trade to discuss a report prepared by the Grain Committee, with reference to the drying of grain.
" 21	Winnipeg, Man.	Routine matters.
" 26	Winnipeg, Man.	Routine matters.
Nov. 5	Winnipeg, Man.	Meeting with representatives of the Railway companies and grain trade, regarding shortage of cars in the Province of Alberta.
" 8	Winnipeg, Man.	Investigation of complaints and routine matters.
" 25	Winnipeg, Man.	Investigation of complaints and routine matters.
Dec. 2	Winnipeg, Man.	Routine matters.
" 14	Winnipeg, Man.	Investigation of complaints and routine matters.
1928		
Jan. 25	Winnipeg, Man.	Routine matters.
" 27	Winnipeg, Man.	Routine matters.
Feb. 14	Winnipeg, Man.	Complaints and routine matters.
Mar. 7	Winnipeg, Man.	Complaints and routine matters.
" 8	Winnipeg, Man.	Complaints and routine matters.
" 9	Winnipeg, Man.	Complaints and routine matters.
" 19	Montreal, Que.	Meeting with representatives of the grain trade for discussion of a complaint received by the Board regarding the endorsement of certificates tendered covering a shipment of 3 Northern Wheat shipped on S.S. "Albertic" by Messrs. James Richardson & Sons.
" 19	Montreal, Que.	Conference with officials of the Montreal Harbour Commissioners *re* handling of grain.
" 20	Montreal, Que.	Meeting for the purpose of considering the report of the Committee appointed regarding the method of endorsing certificates covering grain shipments from Montreal.
" 24	Montreal, Que.	Routine matters.
April 4	Winnipeg, Man.	Complaints and routine matters.
May 3	Winnipeg, Man.	Complaints and routine matters.
June 11	Winnipeg, Man.	Meeting with representatives of the Scottish Co-operative Wholesale Society with regard to cargoes of grain received by them during the last three years.
" 13	Edmonton, Alta.	Complaints and routine matters.
July 16	Montreal, Que.	Meeting with Canadian National and American Railway officials *re* movement of U.S. grain through Montreal.
" 16	Montreal, Que.	Meeting with Survey and Standards Boards and representatives of the Montreal Harbour Commissioners regarding American grain for export passing through the port of Montreal.
Aug. 8	Winnipeg, Man.	Complaints and routine matters.
" 22	Winnipeg, Man.	Tariff of Charges, Public Terminal Elevators and Country Elevators; also Rules and regulations governing Country Elevators for the season 1928-29.
" 24	Camrose, Alta.	Investigation of complaint filed by Mr. O. A. Hastings, of Heisler, Alta., against the N. Bawlf Grain Co., Ltd.
" 27	Vancouver, B.C.	Tariff of charges for Public Terminal Elevators at Vancouver, B.C., for crop year 1928-29.
" 29	Victoria, B.C.	Meeting with the Premier and Executive Council of the Legislative Assembly of British Columbia for the purpose of discussing the matter of the sale of screenings to B.C. dairymen and poultry breeders.

CHAPTER IX

Statement of Revenue and Expenditure for Crop Year Ending August 31, 1928—Eastern and Western Divisions

WESTERN DIVISION

(A) Winnipeg—		
Receipts—Inspection fees	$ 250,636 00	
Weighing fees	30,891 55	
Samples sold	12,994 42	
Overtime	3,510 00	
Sundries	964 80	
		$298,996 77
Expenditure—Salaries—Inspection	342,398 31	
Salaries—Weighing	88,194 70	
Rents—Inspection	23,590 04	
Rents—Weighing	1,256 46	
Expenses—Inspection	23,780 57	
Expenses—Weighing	750 32	
		479,970 40
Deficit		$ 180,973 63
(B) Keewatin—		
Receipts—Weighing fees	7,016 00	
Overtime	177 60	
		7,193 60
Exepnditure—Salaries—Weighing	6,551 60	
Expenses	66 25	
		6,617 85
Surplus		575 75
(C) Kenora—		
Receipts—Weighing fees	2,636 00	
Overtime	25 00	
		2,661 00
Expenditure—Salaries—Weighing	2,485 00	
Expenses	46 25	
		2,531 25
Surplus		129 75
(D) Peterborough—		
Receipts—Weighing fees	2,303 00	2,303 00
Expenditure—Salaries—Weighing	2,280 00	
		2,280 00
Surplus		23 00
(E) Portage la Prairie—		
Receipts—Weighing fees	3,988 00	3,988 00
Expenditure—Salaries—Weighing	4,920 00	4,920 00
Deficit		932 00
(F) Prince Rupert—		
Receipts—Inspection fees	8,337 00	
Weighing fees	14,256 00	
Samples sold	142 59	
		22,735 59
Expenditure—Salaries—Inspection	5,837 75	
Salaries—Weighing	3,945 50	
Expenses—Inspection	120 71	
Expenses—Weighing	12 00	
		9,915 96
Surplus		$ 12,819 63

Statement of Revenue and Expenditure for Crop Year Ending August 31, 1928—Eastern and Western Divisions—*Continued*

WESTERN DIVISION—*Continued*

(G) Transcona—		
Receipts—Weighing fees	$ 12,592 90	
Overtime	1,067 90	
		$ 13,660 80
Expenditure—Salaries—Inspection	7,278 48	
Salaries—Weighing	4,700 17	
		11,978 65
Surplus		1,682 15
(H) Saskatoon—		
Receipts—Inspection fees	8,586 00	
Weighing fees	9,732 00	
Samples sold	72 05	
Overtime	589 75	
		18,979 80
Expenditure—Salaries—Inspection	10,642 50	
Salaries—Weighing	10,504 30	
Rent—Inspection	788 70	
Sundries—Inspection	2,000 96	
		23,936 46
Deficit		4,956 66
(I) Moose Jaw—		
Receipts—Inspection fees	32,766 00	
Weighing fees	9,461 00	
Samples sold	1,175 62	
Overtime	391 37	
		43,793 99
Expenditure—Salaries—Inspection	59,591 58	
Salaries—Weighing	8,597 12	
Rent—Inspection	1,284 00	
Sundries—Inspection	5,582 51	
Sundries—Weighing	48 55	
		75,103 76
Deficit		31,309 77
(J) Calgary—		
Receipts—Inspection fees	48,868 00	
Weighing fees	24,085 50	
Samples sold	2,041 76	
Overtime	408 75	
		75,404 01
Expenditure—Salaries—Inspection	41,318 85	
Salaries—Weighing	21,127 75	
Rent—Inspection	2,716 75	
Sundries—Inspection	3,654 16	
		68,817 51
* Surplus		6,586 50
(K) Edmonton—		
Receipts—Inspection fees	41,330 00	
Weighing fees	9,339 50	
Samples sold	1,651 97	
Sundries	2 50	
Overtime	366 50	
		52,690 47
Expenditure—Salaries—Inspection	43,560 67	
Salaries—Weighing	7,129 90	
Rent—Inspection	3,360 00	
Sundries—Inspection	5,279 93	
Sundries—Weighing	90 55	
		59,421 05
Deficit		6,730 58

Statement of Revenue and Expenditure for Crop Year Ending August 31, 1928—Eastern and Western Divisions—*Continued*

WESTERN DIVISION—*Continued*

(L) Vancouver—		
Receipts—Inspection fees	$ 86,491 00	
Weighing fees	149,374 00	
Samples sold	976 23	
Overtime	305 25	
		$ 237,146 48
Expenditure—Salaries—Inspection	59,130 85	
Salaries—Weighing	47,129 30	
Rent—Inspection	300 00	
Sundries—Inspection	1,844 63	
Sundries—Weighing	845 83	
		109,250 61
Surplus		127,895 87
(M) Duluth—		
Receipts—Inspection fees	1,996 85	
		1,996 85
Expenditure—Salaries—Inspection	3,720 50	
Expenses	255 97	
		3,976 47
Deficit		1,979 62
(N) Medicine Hat—		
Receipts—Inspection fees	6,748 52	
Weighing fees	7,215 00	
Overtime	124 00	
		14,087 52
Expenditure—Salaries—Inspection	4,784 00	
Salaries—Weighing	8,674 28	
Rent—Inspection	310 00	
Sundries—Inspection	319 24	
		14,087 52
(O) Fort William—		
Receipts—Inspection fees	358,021 00	
Weighing fees	609,311 00	
Samples sold	8,842 09	
Sundries	6 80	
Overtime	29,838 64	
		1,006,019 53
Expenditure—Salaries—Inspection	341,540 22	
Salaries—Weighing	289,372 20	
Rent—Inspection	8,946 00	
Rent—Weighing	2,179 64	
Sundries—Inspection	9,277 05	
Sundries—Weighing	2,845 27	
		654,160 38
Surplus		351,859 15
(P) Appeal Boards—		
Receipts—Appeal fees—Winnipeg	1,925 00	
" Calgary	1,672 00	
" Edmonton	1,482 00	
		5,079 00
Expenditure—Salaries—Winnipeg	6,750 00	
Salaries—Calgary	4,300 00	
Salaries—Edmonton	4,300 00	
Rent—Winnipeg	408 00	
Rent—Calgary	336 36	
Rent—Edmonton	600 00	
Sundries—Winnipeg	87 50	
Sundries—Calgary	393 72	
Sundries—Edmonton	88 08	
		17,263 66
Deficit		12,184 66

Statement of Revenue and Expenditure for Crop Year Ending August 31, 1928—Eastern and Western Divisions—*Concluded*

WESTERN DIVISION—*Concluded*

(Q) Summary—Western Division—		
Revenue—Inspection fees	$ 843,780 37	
Weighing fees	892,201 45	
Samples sold	27,896 73	
Overtime	36,804 76	
Sundries	974 10	
Registration fees	29,771 12	
License fees	27,250 00	
Appeal fees	5,079 00	
		$1,863,757 53
Expenditure—Inspection—Salaries	919,803 71	
Weighing—Salaries	505,611 82	
Inspection—Expenses	93,411 22	
Weighing—Expenses	8,141 12	
Appeal Board—Salaries	15,350 00	
Appeal Board—Expenses	1,913 66	
Registration—Salaries	17,272 20	
Registration—Expenses	2,565 73	
Grain Research Laboratory—Salaries	19,845 21	
Grain Research Laboratory—Expenses	17,801 71	
Western Grain Standards Board	2,507 65	
Board of Grain Commissioners—Salaries	82,780 93	
Board of Grain Commissioners—Expenses	15,515 34	
General Expenses—Audit	1,300 00	
General Expenses—Sundries	295 43	
Printing and stationery, all branches	41,616 13	
		$1,745,731 86
Surplus		118,025 67

EASTERN DIVISION

(R) Montreal—		
Receipts—Inspection fees, etc.	$91,941 25	
		$ 91,941 25
Expenditure—Salaries	30,275 60	
Rent	1,979 64	
Sundries	4,318 28	
Printing and stationery	1,042 59	
		37,616 11
Surplus		$ 54,325 14
(S) Toronto—		
Receipts—Inspection fees, etc.	1,190 98	
		1,190 98
Expenditure—Salaries	7,660 00	
Rent	660 00	
Sundries	537 09	
Printing and stationery	48 06	
		8,905 15
Deficit		7,714 17

Summary

Montreal—Surplus		$ 54,325 14
Toronto—Deficit		7,714 17
		46,610 97
Cost of Eastern Standards Board	$ 334 81	
Cost of Audit	200 00	
		534 81
Surplus		$ 46,076 16

SUMMARY—EASTERN AND WESTERN DIVISIONS

Eastern Division—Surplus	46,076 16
Western Division—Surplus	118,025 67
Surplus	$ 164,101 83

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF THE INTERIOR

FOR THE

FISCAL YEAR ENDED MARCH 31, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the report of the transactions of the Department of the Interior for the fiscal year ended March 31, 1928.

Respectfully submitted,

CHARLES STEWART,

Minister of the Interior.

OTTAWA, November 10, 1928.

TABLE OF CONTENTS

	Page
REPORT OF THE DEPUTY MINISTER	5
I—DOMINION LANDS	
REPORT OF THE COMMISSIONER OF DOMINION LANDS	36
Land Patents Branch	38
School Lands Division	46
Mining Lands Branch	50
Timber and Grazing Lands Branch	57
Ordnance, Admiralty and Railway Lands Branch	60
Financial Controller	61
II—FORESTRY	
REPORT OF THE DIRECTOR OF FORESTRY	66
III—NATIONAL PARKS OF CANADA	
REPORT OF THE COMMISSIONER OF NATIONAL PARKS	76
IV—WATER POWER AND RECLAMATION	
REPORT OF THE DIRECTOR OF WATER POWER AND RECLAMATION	105
V—NORTH WEST TERRITORIES AND YUKON	
REPORT OF THE DIRECTOR, NORTH WEST TERRITORIES AND YUKON BRANCH	119
VI—SURVEYS BUREAU	
REPORT OF THE DIRECTOR GENERAL OF SURVEYS	137

REPORT

OF THE

DEPARTMENT OF THE INTERIOR

1927-28

Hon. CHARLES STEWART,
Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the fifty-fifth Annual Report of the Department of the Interior for the fiscal year ended March 31, 1928.

Perhaps the most outstanding feature of the year under review, from a national standpoint, was the celebration of the Sixtieth Anniversary of the Confederation of the older of the Canadian provinces. The Department of the Interior, one of the earliest administrative organizations of the federal Government, was established in 1873, six years after Confederation, and in view of its instrumentality in organizing, consolidating, populating, and exploring the interior of British North America the Jubilee year of Confederation was a landmark of achievement in the affairs of the department, as well as an opportunity for all Canadians to view with pride the great changes and accomplishments which sixty years have wrought.

The year 1927 found Canada in many respects one of the most enviable countries of the world, and in the enjoyment of a tide of natural and, therefore, enduring prosperity, which had not then, nor has not yet, reached its flood. As no time has it been possible for a rising generation to reach out for such chances of fortune or such a heritage of Empire as is offered to-day in the wide spaces of this Dominion. Using the achievements of the past, and the present knowledge of our resources as measures of future accomplishment, there is every indication that the period of sixty years which has passed since Confederation is merely the overture in the full process of national growth, expansion and development.

With the development of the country there has naturally been a great increase in the work of administration, and many functions of the Department of the Interior in the earlier years of Confederation have now become the work of separate departments of state, such as the Geological Survey, Royal Canadian Mounted Police, Immigration, and Indian Affairs. It is not too much to say that at one time or another by virtue of its administration of the lands and resources of the Canadian West and the initiation of policies which have fallen within its responsibilities, the Department of the Interior has been an important agent in influencing the development of the foremost primary industrial movements in Canada.

To-day the department administers, or keeps in close touch with, forest and mineral resources of great potential wealth; tremendous water-power resources which are vital to industrial development; and game, wild-life, and scenic resources of growing importance. The total area for the territorial management of which the Department of the Interior is responsible still comprises more than half the Dominion. With the growth of efficient administrative departments in the older provinces the need for a central national co-ordinating organization which, though not interfering in the slightest degree

in the provincial field, serves a useful and necessary purpose in weaving together the strands of provincial effort and interpreting them nationally, has been emphasized. Thus the Water Power and Forestry Branches, in addition to administrative work in their own fields, on Dominion lands, also collect and combine data of general utility and conduct educational campaigns which present Canada to the world as a well-knit unit, and not merely as a number of individual provinces. The Natural Resources Intelligence Service is national in scope and its maps and the records of its investigations are available to all.

Naturally, this function of the department—to represent the national viewpoint in those fields of effort parallelling its own administrative responsibilities, and to strike a note of progress in new fields of nation-wide interest related thereto—becomes more important with the passing of time and is nowhere shown to better advantage than in the striking way in which the provinces and business interests have got behind and effectively supported the post-war efforts of the Department of the Interior to exploit those national assets in which Canada excels, such as scenery, climate, and winter sports. Six years ago the officially estimated balance of expenditures of tourists in Canada, after deducting the expenditures of Canadian tourists in other countries, was below the fifty million dollar mark; to-day it is more than three times that figure; but of greater importance than this is the general realization that the trade offers a field of almost limitless opportunity for future development. Thanks to adequate and well placed publicity; the general movement towards the construction of good roads; the splendid hotel, railway, and steamboat facilities; and the enthusiasm of civic, banking, and commercial interests throughout the land, Canadians are now reaping the benefits of a trade which has long remained comparatively dormant. Nor are these benefits all financial. The tourist business in its stimulation of intercourse between nations makes for harmonious relations and better understanding. Locally, along all the arteries of traffic, the benefits accruing from the trade are seen in the improvements effected in the appearance of towns and villages. In catering to the psychological appeal which such attractive arrangements have to the incoming tourist, local communities have so to speak found for themselves a better place in the economic scheme of things. Many attractive places, eminently suited for tourist resorts, were vying not so many years ago with typically industrial sites for the attraction of manufactures, whereas to-day they are pursuing a more enlightened policy of preserving their natural beauty and developing their attractions to the increased profit of their citizens and to the benefit of the country generally.

In the matter of forest administration the Forest Service has furthered and made more effective the policy of the department to conserve timber resources and, where possible, plan well ahead for permanence of supplies. Canada is one of the few countries of the world whose forests provide a large surplus over and above the home consumption. Nearly one-half of the total cut is exported in various manufactured and unmanufactured forms, and unless a policy of scientific forest management is vigorously developed by the governments concerned in conjunction with the operating industries as well, our export position must suffer in the course of time. Over a period of years the Forest Service has urged and done much in the interests of forest protection through intensive publicity campaigns, and a profound impression has been made on the public conscience to resist carelessness in the use of fire. The results are decidedly encouraging and there is ground for the feeling that the public mind is becoming seized of the urgent necessity for forest conservation.

The pulp and paper industry is now facing a period of over production. This situation may best be met by a wise policy of forest management which will set out the areas to be logged, limit the amounts to be cut, and indicate the methods to be followed to ensure most successful reproduction.

The fire situation on Dominion lands protected by the Forest Service was the most favourable in the past ten years due to exceptionally good weather conditions and more efficient organization for fire protection. Fires within and outside national forests totalled 661, as compared with 1,398 in 1926-27, 1,165 in the fiscal year 1925-26, and 1,487 in the year 1924-25.

An increased desire is noted on the part of the public to use the national forests for purposes of recreation and sport. The primary objects for which national forests are set aside are, of course, the conservation and production of timber supplies and the retention or establishment of a forest cover on important catchment areas. It is only in conformity with these objects that other uses can be permitted, but experience has shown that the reserves may serve several other purposes which are not incompatible with those objects. The public and the tourist may be admitted with benefit to all concerned if reasonable precautions are taken.

Many areas of the national forests serve a very useful purpose to the live stock industry by providing summer range for the grazing of stock. Here also, although grazing is not a primary purpose in the establishment of forest reserves, it is possible under careful regulation and with great advantage to all concerned to serve the requirements of this important industry.

As regards the timber crop from national forests, this is carefully harvested with a view to maximum reproduction and improved growing conditions. It is sold both for commercial purposes and for settlers' use. Agriculture, the foremost industry of the Dominion, enjoys a preference in national-forest timber and requirements of neighbouring farming settlements are among the first to be provided for. An important step in the management of national forests has been the framing of more flexible regulations in connection with the disposal of the relatively small quantities of timber to settlers. Similarly the regulations for the sale of timber for commercial purposes are being constantly improved. Generally operators are co-operating to a greater extent in the matter of restrictive cutting and proper methods of slash disposal, and with the increasing development of the country the national forests are contributing more and more to local industry.

The tree-planting program as related to prairie farms has been continued. In the spring of 1927 seven and half million trees were distributed to farmers. During the period for which this tree-planting policy has been in effect thousands and thosuands of farm plantations and shelter-belts have been established. In addition to greatly improving the conditions surrounding the prairie home, from an aesthetic standpoint, shelter-belts have rendered possible the growing of fruits and finer vegetables which formerly could not be produced under the exposed conditions which obtained.

Substantial progress has been made in the work of the Forest Products Laboratories. Under an agreement between the Department of the Interior and the Pulp and Paper Association of Canada, when the main laboratories were moved to Ottawa, the Pulp and Paper Division was left in Montreal, where the association has erected a splendid building in which the division is accommodated. The laboratory at Vancouver is an outpost of the main laboratories, established to deal with problems relating essentially to the coast province. Excellent progress has been made during the year, the institution having thoroughly entrenched itself with the timber industry.

In water-power development there has been 221,655 horse-power added to the water-wheel and turbine installation throughout the Dominion, and at the end of the fiscal year the total installation amounted to 4,777,921 horse-power. Developments have been spread broadly throughout the country. Cheap and conveniently located power is almost as vital to industry as is raw material and inasmuch as our chief industrial provinces are not coal-producing the

hydro-electric resources have been given an added value. The first twelve years of this century saw the romance of opening up our rich prairie lands for wheat-growing. Then followed the striking rise of the pulp and paper industry. The future gives promise of greatly accelerated progress in the exploitation of the rich mineral wealth of the Laurentian Shield. The pulp and paper industry in Canada owes its position of leader in a world competitive market to the extensive water-powers which can be developed at a relatively low cost and are found in proximity to pulpwood resources. The metal mining industry is dependent largely upon the availability of cheap hydro-electric power. These things, apart from the numerous domestic uses in cities and rural districts, which increase the comfort and help to maintain the high standard of living of Canadian citizens, show at once the dependence of our industrial populations on water-power. Canada's good fortune in regard to this source of energy will be more apparent as time goes on, for the Water Power and Reclamation Service estimates that the present total water-power installation is only a little more than 11 per cent of the possible development. The Minister of the Interior, in addition to his other duties, advises the Government on international questions relative to the joint waters of Canada and the United States. The extent and scope of these questions, the present activity of many of them and their importance to both Dominion and provincial interests, has resulted in this feature of the activities of this service becoming one of growing responsibility and importance.

In the field of irrigation the season of 1927 was exceptionally favourable as regards natural precipitation and little water was required for this purpose. The sugar-beet crops on areas tributary to the Raymond sugar factory have proved of great value to settlers on irrigated lands. This factory was erected in 1925 and has a capacity of 1,000 tons of beets per twenty-four hours. Since beginning operations the guaranteed rate paid to farmers for beets has increased from $5.75 per ton in 1925, and $6.25 in 1926, to $7 in 1927.

The policy of setting aside national parks dates back to 1885 and is closely linked with the desire to preserve for posterity the most typical or beautiful spots of Canada in their original state. As time goes on and our country becomes more populous such reservations will be even more highly appreciated than they are to-day. All the national parks are sanctuaries of wild life but certain of them were specially reserved to that end. Thus Buffalo, Elk Island, and Nemiskam parks in Alberta are the homes of valuable herds of big game including buffalo, elk, moose, muledeer, and antelope. Other parks have become world renowned resorts, unsurpassed for their scenic beauty. Among this group Jasper, Rocky Mountains, Waterton Lakes, Yoho and Glacier stand out supreme. Still others are outstanding for their historic associations.

In all there is now an area of more than 11,000 square miles reserved as national parks and the Department of the Interior maintains many hundreds of miles of first class motor highway and about two thousand miles of trails within and linking the parks.

In road construction the fiscal year under review has been marked by the completion of the Field-Golden section of the Kicking Horse Trail, linking Lake Louise, Alta.; and Golden, B.C. The year 1926 saw the opening of the Lake Louise-Field section of this highway so that the Kicking Horse Trail is now completed. The official opening took place on July 9 and the relatively heavy traffic which passed over the road during the first short season portends the popularity which this newly created highway route is destined to have.

The completion of the western link of the Trans-Canada highway which has been under consideration for some time awaits the construction of a stretch of motor road between Golden, B.C., and Revelstoke, B.C. The choice of the

route which this final link should take has been a matter of very careful thought by the department and the Big Bend or Columbia River route has finally been decided upon.

In Jasper park a stretch of over two miles of road was experimentally surfaced with bituminous sands obtained from the McMurray region. Experience has now shown that the tar sands of Alberta are particularly suited to this purpose. The material gives an even and dustless surface with little or no tendency for cars to slip or skid in wet weather; it also compares very favourably, as regards cost, with other materials. The rapidly growing demands for good highway surfaces bring nearer the commercial development of the McMurray deposits and there is little doubt that these bituminous sands will prove one of Alberta's important natural resources.

Towards the close of the fiscal year a reservation was set aside, known as Prince Albert national park, in Saskatchewan. It contains some of the finest scenery in this part of the country and will benefit the people of the Prairie Provinces not only as a health and recreational resort but also as a magnet for tourist travel. The park is situated about 35 miles north of Prince Albert. The area is well timbered and its many lakes are plentifully supplied with fish. The park is the gateway to a maze of waterways rich in historic interest and full of the romance of pioneer exploration.

The growing appreciation of the value of outdoor recreational areas is emphasized by the demands being made, from Manitoba to the Atlantic coast, for the setting aside and early development of lands that either meet the high standards of national parks or that are especially suitable for outdoor recreational purposes. In view of this the National Parks Branch is making a survey of the Dominion from coast to coast with regard to outdoor recreational features and areas. Once detailed information in this connection is secured, the various areas will be classified with a view to the development of methods for their utilization to their fullest extent. With this will naturally be associated plans for a co-ordination of effort by all organizations concerned in recreation and recreational areas, it being felt that much can thus be accomplished for Canada.

The revenue of the National Parks Branch increased by over 15 per cent compared with the previous fiscal year.

The use of aeroplanes has greatly facilitated the work of prospecting and opening up that portion of the Dominion which lies north of the fringe of settlement in the Prairie Provinces. So far as this relates to the northern portions of Manitoba and Saskatchewan the development stage has been reached and the new enterprises in the metal-mining field promise to bring about a diversification in basic industry and provide a stability and balance which as a wheat country alone the West could hardly hope to have. With mines and water-power there exists the foundation of all forms of manufacturing industry, and viewed from this angle the future of the Prairie Provinces is very bright. There is no geological formation known which combines within itself such a variety of mineral resources as the great Laurentian Shield has exposed in those sections which have been prospected. Commercial and financial interests are now confidently working along the little known northwest flank of the Shield, with the assurance that the results will amply repay their labours and investments. Prospecting operations have, in fact, reached the area about Great Slave lake where a group of claims containing zinc and lead is undergoing careful examination.

The oil and gas fields of Alberta continue to be the centre of much interest both in the matter of steady development and in regard to their latent possibilities. Substantial progress in both respects has been made during the year. The Turner Valley area, some forty miles southwest of Calgary, has again been the

focus of drilling activities, although the strike of oil made in the Devenish Well near Skiff in southern Alberta attracted much attention, as opening up a wide potential area, capable of yielding oil at moderate depths.

The deepening of many of the wells started during previous years in Turner valley and the addition of a number of new ones, have fully justified the hopes raised in regard to this field. The results indicate that the dolomitic limestone, to the importance of which as producer of naphtha-laden gas Royalite No. 4 first called attention in 1924, yields the same grade of naphtha combined with phenomenally high pressure gas when penetrated by other wells, although the individual yields, of course, vary. The continual growth in the gas production in this field has called for the enlargement of facilities for its utilization. These have been provided by the operators without, however, their being entirely able to keep pace with the situation, the consumption being still largely subject to much seasonal variation. The increase in production has enabled the older producing areas of Bow Island and Foremost to be taken in hand for repairs and for experiments in repressuring with the surplus gas.

In this and other ways it is becoming evident that the labours of past years of the engineering advisers of the Department of the Interior in bringing home to operators the need for careful and adequate methods of drilling and protecting wells have borne fruit, for not only is excellent work in the development and conservation of these important natural resources being done by lessees on Dominion lands, but in the majority of cases lessors and lessees of other lands are showing their appreciation by co-operation in this direction. The oil production for the fiscal year amounted to 358,000 barrels, and the gas consumed during the calendar year 1927 amounted to over twelve thousand million cubic feet.

The territories north of the provincial boundaries are entirely administered by the North West Territories and Yukon Branch of this department. There is a sincere realization that in the development of the possibilities of the hinterland, particularly the Arctic regions, the native population is destined to play a very important part. Serious study is being given the problem of providing convenient opportunities for the natives to develop themselves by practising the handicrafts for which nature has fitted them and implanting firmly in their minds the necessity for conservation in its broadest terms as affecting not only forests and wild life but human health, energy, and economic well being.

To-day the staple industry in the Northwest Territories is still the fur trade. The policy of the department as regards the destruction of predatory animals has been developed over a number of years to successfully combat the natural enemies of the more valuable fur-bearers and of those forms of wild life upon which the natives depend for subsistence. Before the fiscal year 1925-26 the bounty system for the destruction of such predatory animals was set at $20 for each wolf killed, the pelt not being surrendered. Since that year a bounty warrant for $30 has been issued in consideration of the surrender of the whole pelt to the Government. The results of the new system were immediate and striking. In the first year of its application the number of wolves killed was 576, almost double that of the previous year. By 1926-27 the number had increased to 680 pelts and during the last fiscal year not far short of 1,000 pelts (actually 974) have been turned in. Equally satisfactory is the steady increase in the average sale price of the pelts. In 1925-26 this was $16.14, in 1926-27 it had reached $17.41, and in the fiscal year under review it was $24.

The total value of the furs traded in the Northwest Territories in 1926-27 is estimated at nearly three million dollars—65 per cent greater than the estimated value of the previous year's trading.

In Yukon mining is, as it has always been, the basic industry, and the future as regards lode-mining never looked as promising as it does to-day. The

gold production from placer claims for 1927-28 was valued at $568,221, as compared with an output valued at $497,504 for the previous fiscal year. The value of minerals taken from quartz properties including, silver, lead, and some gold, exceeded $1,937,300. The copper mines of the Whitehorse district will shortly be at a producing stage again. It is of interest to note that the value of the furs exported from Yukon territory during the year ended 30th June, 1927, totalled $382,261.

All general Dominion lands business, including minerals and timber in the Prairie Provinces, the Railway Belt and the Peace River Block of British Columbia, and all that concerning School lands, is carried on by the Dominion Lands Administration. The work has shown increased activity during the year. From Dominion lands, as distinct from School lands which are held in trust for the provinces, there was received for the fiscal year a total revenue of $3,763,-408.56, which is the greatest revenue recorded since the fiscal year 1920-21. The revenue from School lands increased by 33 per cent over the previous fiscal year.

The average prices obtained for School lands at the sales conducted by the department during the year have exceeded all expectations. They were the best on record and, since the conditions under which the sales took place precluded speculation, the good average prices indicate a healthy condition of agriculture in the Middle West. No previous general sales of this nature have been held since 1920 because, owing to the quick recession in land values the provinces concerned preferred to wait until conditions were more favourable. Altogether more than 480,000 acres were sold in 1927 and the average price obtained was $18.70 per acre (the lowest was $7 per acre and the highest $79). The purchasers were largely neighbouring farmers who knew the land and its value for production purposes, so that the results of the sales are evidence of a growing confidence in the future of prairie agriculture and the present strong financial position of the farming communities.

Agriculturists and ranchers are making increased use of Dominion lands for the grazing of stock. This suggests a betterment of conditions in the live stock industry which has suffered from a combination of circumstances affecting markets. During the fiscal year, on Dominion lands in the provinces of Manitoba, Saskatchewan, Alberta, and in the Railway Belt of British Columbia and the Peace River Block, there were 10,601 grazing leases in existence. These covered an area of approximately 6,727,015 acres.

The Dominion Observatory at Ottawa and the Dominion Astrophysical Observatory at Victoria, B.C., have continued their investigations in the fields of isostacy, terrestrial magnetism, seismology, solar physics, astrophysics, and general astronomy. Their work is purely scientific and although it does not directly touch the economic field it materially influences human advancement and well being.

All the survey work of the department including geodetic surveys, topographical surveys and International Boundary surveys has been co-ordinated since 1922 through the Surveys Bureau under the Director General of Surveys.

Surveying as carried on by this department in the early days had one object in view, namely to provide the incoming settlers with secure title to their homesteads. Mapping of large areas, if thought of at all, was confined to compilations of existing plans and sketches, and the recording of exploratory surveys. During this period the maps produced were necessarily detached sheets some of them possibly lacking in accuracy and completeness. Triangulation and levelling for the very accurate fixing of selected points throughout the country were begun about twenty years ago and this work is being continued and extended by the Geodetic Survey. More recently, the demand for farm lands having diminished temporarily, the Topographical Survey has been able

to devote increasing attention to the making of an accurate topographical map series that will eventually cover the whole country. The more settled parts are being mapped first but several sheets have been produced covering the rapidly developing mineral areas in the great northern hinterland. This work has been made possible by the assistance of aerial photography and its application to mapping. In this new development there is the closest co-operation with the Royal Canadian Air Force.

During the year the town planning activities of the department, formerly carried on under the National Parks of Canada Branch, were transferred to the Surveys Bureau and the staff will henceforth function as the Town Planning Division of that organization.

The total revenue received from all sources was $6,194,476. This is the highest revenue which has been recorded by this department for any of the last seven fiscal years and shows an increase of over 15 per cent compared with the year 1926-27.

Outlines of the work of the various branches of the department follow.

Lands Patents

Letters Patent.—The number of letters patent issued during the fiscal year was 5,490, covering an area of 938,652 acres, made up by provinces as follow:—

Province	Patents	Acres
Manitoba	495	66,507
Saskatchewan	2,534	382,644
Alberta	2,142	461,715
British Columbia	295	27,056
Yukon Territory	18	725
Northwest Territories	6	5
Totals	5,490	938,652

Homestead Entries.—Seven thousand two hundred and thirty-three (7,233) homestead entries were granted during the year, aggregating an approximate area of 1,157,280 acres, being an increase of 1,473 in the number of homesteads granted, as compared with the previous year.

By provinces the entries were made up as follows: Manitoba, 688; Saskatchewan, 2,961; Alberta, 3,411; British Columbia, 173; total, 7,233.

There were 504 soldier grant entries made during the year, aggregating an approximate area of 80,640 acres, made up by provinces as follow:—

	Number of entries	Acres
Manitoba	35	5,600
Saskatchewan	226	36,160
Alberta	216	34,560
British Columbia (Railway Belt and Peace River Block)	27	4,320
Totals	504	80,640

Accounts and Revenue.—During the fiscal year $701,382.27, including $328,759.36 interest on deferred payments, was received on account of purchased homesteads, pre-emptions and ordinary sales, showing an increase of $174,003.46 as compared with the payments received during the previous year.

The sum of $131,031.30 was received for entry fees, improvements and sundries, making a total revenue for the fiscal year of $832,413.57.

Refunds were made amounting to $27,207.20 as follow:—

Value of improvements collected on cancelled homesteads	$ 22,867 73
Overpayments on sales; and on moneys on account of purchased homesteads and pre-emption sales, entries for which had been cancelled	4,339 47
	$ 27,207 20

School Lands

During the fiscal year ended March 31, 1928, school lands were disposed of by public auction and private sales in the provinces of Manitoba, Saskatchewan and Alberta as follow:—

Province	Area in acres	Value	Average per acre
Manitoba	41·02	$ 296 14	$ 7 22
Saskatchewan	276,800·14	5,446,630 23	30 81
Alberta	210,932·70	3,556,163 55	16 85

The approximate net areas disposed of to March 31, 1928, after making deductions for cancelled sales and adjustments in regard to changes in area, were as follow:—

Province	Area in acres	Value	Average per acre	Value of town lots
Manitoba	637,585·67	$ 6,118,687 26	$ 9 60	$ 5,240 00
Saskatchewan	1,441,203·49	24,145,618 59	16 75	13,701 00
Alberta	949,225·57	13,663,537 24	14 39	39,380 00

The revenues collected for the fiscal year (less principal moneys and less expenditure) and paid over to the provinces were as follow: Manitoba, $25,486.86; Saskatchewan, $279,889.03; Alberta, $299,053.92.

The amounts of interest paid in the fiscal year on the investments to the three provinces were as follow: Manitoba, $292,350; Saskatchewan, $752,700; Alberta, $390,125.

Mining Lands

Mining on lands controlled by the Department of the Interior has, in the past, been confined to the mining of coal and the production of natural gas, particularly in the province of Alberta, and the mining of placer gold in the Yukon Territory. The production of these minerals has been of great economic importance, but while the production of coal and the use of natural gas from Dominion lands are increasing, the production of placer gold has fallen off considerably and is succeeded by the production of silver and lead from mines situated in the Mayo District of Yukon.

The production of natural gas in southern Alberta has been on a commercial basis for nearly twenty years, and new markets for the surplus product are being sought. Edmonton and surrounding towns and villages in central Alberta are now being served with ample supplies of natural gas.

The outstanding events during the last fiscal year in the way of mining developments on Dominion lands were the 'bringing in' of a number of oil wells in Alberta, and the taking over of the Flin Flon Mine by the Hudson's Bay Mining and Smelting Company.

The additional oil-producing wells of Alberta have established that province as an oil-producing area, and have been the means of focusing the attention of large oil-producing concerns on the possibilities of Alberta as a field for exploitation, and some companies have made large expenditures for geological research and for the purpose of acquiring leases.

To develop the metallic minerals found in the rocks of northern Manitoba a railway is under construction to the Flin Flon Mine, and on its completion in December, 1928, the erection of a smelter to treat the ores of this mine will be commenced. The present expectations are that the Flin Flon Mine will be one of the largest copper mines on the continent. In the same district development work on a number of properties, such as the Sherritt-Gordon Mine and the Mandy Mine, indicate that there will be many large mines in operation within a few years.

In central Manitoba, owing to the availability of hydro-electric power and the short distance from railway transportation, the Central Manitoba

Mines Limited have had in operation since the fall of 1927 a mill capable of treating one hundred and fifty tons of ore per day, and they employ about one hundred and forty men in the mill and mine. This is a gold mining proposition.

There are many thoroughly equipped, well-financed prospecting expeditions organized and now in the field searching for minerals in the Northwest Territories. The use of aircraft has made it possible to explore in any portion of northern Canada.

All signs indicate that the production of metallic minerals from Dominion lands will, in the near future, assume as great importance as the production of non-metallic minerals, such as coal, petroleum, and natural gas.

Timber and Grazing

The increase in revenue from timber, grazing and hay lands was $198,806.02 over the revenue for the previous fiscal year, or a little over 16 per cent advance, as against 10 per cent advance in the year ended March 31, 1927. The comparative statement shows a growth in revenue from $534,381 in 1917 to $1,416,719 in 1928, an increase of nearly $900,000. The amount of bonus received during the year averaged $16,000 a month.

In regard to the areas affected, timber berths cover 6,466 square miles and grazing leaseholds 6,727,015 acres, as against 6,912 square miles and 6,202,255 acres, respectively for the previous year. About 120 more berths were granted, and over 800 were operated out of a total of 1,332. The net increase in the total amount of revenue received from timber is $188,147.37, and from grazing and hay $7,931.73 as compared with the preceding year.

The largest revenue from timber was received through the New Westminster agency, which was nearly $410,000, as against about $376,000 for the previous year. In the Prairie Provinces the Edmonton agency had the largest revenue, with the Prince Albert agency coming second.

As regards material manufactured, there were increases of over 50,000,000 feet board measure of lumber, 219,000 linear feet of piling, etc., nearly 700,000 linear feet of mining timber, nearly 48,000 cords of pulpwood and 436,000 railway ties.

Ordnance, Admiralty and Railway Lands

The work of inspecting and surveying Ordnance Lands has been carried on steadily, and more of these lands are continually being placed under remunerative occupation. A number of valuable reserves are yet to be dealt with when certain legal impediments are removed but the most valuable of such parcels as are available for disposition have been placed under occupation or are now receiving attention.

National Parks of Canada

A wider national interest in the parks of Canada is evidenced in two directions, first, in the greatly increased travel to the existing national reservations, and second, in the demand for the establishment of further recreational areas in other parts of the country.

The number of visitors to the parks in the past year was the highest yet recorded, reaching a total of approximately 360,000. The fact that approximately two-thirds of these visitors were motorists indicates the part now played

by the automobile in holiday travel. The most popular objective was the three-park unit comprised of the Rocky Mountains, Yoho, and Kootenay national parks, which are now linked together by a circle motor highway having direct connections with main through highways on both the east and the west. Over 127,000 motorists, or approximately 35 per cent of the total travel to all parks entered this unit by one of its three gateways. Since the opening up of the Rocky Mountains park to through travel by the completion of the Banff-Windermere highway—now the southern arc of the Circle route—there has been a marked growth in this class of travel and it is interesting to note that the volume of motor travel for each month during the past season exceeded the yearly total of six years ago. The final link of the Circle route was completed during the year by the construction of the Field-Golden highway. This road, which is one of the most spectacular in Canada, opens a new western gateway to the Rockies and permits through travel across Yoho national park. From Golden, B.C., the western terminus, connection is made by way of the Columbia valley with the western end of the Banff-Windermere highway, thus completing a Rocky Mountain Circle route of over 300 miles. Although the new road was not opened until July 9, between that date and the end of the season over 5,500 cars, registering from all parts of Canada and the United States, went over the road.

The addition of one more region to Canada's already fine system of national reservations by the establishment of the Prince Albert park, in Saskatchewan, and the extension of the boundaries of Jasper park so as to include the magnificent region extending from the Columbia ice-field to the northern limits of Rocky Mountains park, were two of the most interesting events of the year.

The Jasper extension sets aside a region as yet little visited but which must come to attract increasing interest. It is here that the Canadian Rockies reach their highest mean elevation and the climax of their snow and ice deposits. The new area contains five great ice-fields of which the Columbia, with an area of approximately 110 square miles, is the largest.

The condition of the Canadian buffalo herd gives cause for satisfaction. The thinning out in recent years has had a beneficial effect both through the weeding out of old and surplus males and through the better forage conditions resulting from decreased numbers. Additional shipments to the Far North, totalling over 1,900 animals, were successfully made throughout the summer, the loss involved being practically nil.

The work of marking and preserving the historic sites of Canada was prosecuted during the year and twenty-four additional sites were marked. Preliminary steps were taken towards the creation of a new historic park, comprising about 300 acres, surrounding the ancient fortress of Louisbourg, N.S., one of the most interesting landmarks in Canada.

The enforcement of the Migratory Birds Convention Act was carried on under the direction of the Commissioner of National Parks as in former years. As a result of surveys of bird conditions carried on by the branch, additional protection was given to certain species which were reported in lessening numbers. The branch is co-operating with the Bureau of Biological Survey of the United States in securing a waterfowl census of the continent with a view to obtaining information upon which future legislation may be based. The serious loss to bird life due to dumping of oil from vessels in navigable waters received much consideration. In November a national conference in which Canada took part was held in Washington and a draft convention was drawn up for submission to the Maritime Powers with a view to preventing this heavy menace to bird life.

Forestry

The Forest Service reports an unusually favourable season in so far as forest fire protection is concerned. The total number of fires on Dominion lands protected by this service was only 661—the lowest number for the past ten years at least. Of these only forty were in the national forests. In one inspectorate only one fire occurred within the national forests and the damage from it was negligible. In Saskatchewan a system of aerial patrol of the northern forests was inaugurated. On the Rocky Mountains forest in Alberta a system of lookout towers was begun. The greatest damage is traceable to neglected camp-fires; fires originating in this way caused 75 per cent of the total loss. Fires arising from railways were more numerous than those originating from camp-fires, but caused less than one-half of one per cent of the total losses; in other words, fires that had their origin in neglected camp-fires caused 250 times as much damage as the fires originated by the railways. Ranking next to camp-fires in point of damage done were, in the order given, incendiary fires (which caused almost one-seventh as much damage as neglected camp-fires), lightning, settlers' brush-burning fires, and smokers.

The largest item of Forest Service revenue continues to be timber sales and permits. The revenue from timber sales shows a substantial increase over 1926-27, though the revenue from timber permits fell off slightly. The total number of timber sales was 157, a marked increase over the total for 1926-7, which was 120. The increase in British Columbia during recent years has been especially marked, the number of timber sales in 1925-6 being 22; in 1926-7, 33; and in 1927-8, 50.

In spite of slight decreases in grazing and hay permits, surface rentals, and special-use permits, the revenue of the service showed a net increase of over $9,000.

The number of grazing and hay permits shows a further decrease. Of late years the favourable seasons have given stock-owners of the Prairie Provinces the opportunity to secure the fodder they needed from their own lands without resorting to the national forests, while the general depression in the industry has had its effect on the demand for forest range.

Experimental seeding and planting in the national forests were continued. A tract of 200 acres, in British Columbia, sown to western cedar, was the largest single area seeded. In Saskatchewan a scheme of nurseries in national forests is being developed which will soon be capable of supplying several millions of trees yearly for planting in the forests.

A very extensive survey was made in the summer of 1927 in Manitoba, the area covered amounting to between 12,000,000 and 13,000,000 acres. This was rendered possible by the co-operation of the Topographical Survey and the Directorate of Civil Government Air Operations. Other smaller areas in the same province were covered by similar surveys, and numbers of more intensive surveys were made in other provinces.

Considerable quantities of forest-tree seed have been extracted, the bulk of which was sent to Great Britain for the Forestry Commission and to New Zealand.

The season for tree plantations was unusually favourable. Considerable damage was done in the permanent birch plantations at the Indian Head nursery station by the bronze birch borer.

The summer resorts in the national forests continue to be visited by many thousands of visitors during the season; in addition, many persons visit various localities in these forests for the purpose of fishing and camping. This use of the forests tends greatly to increase the appreciation of their value on the part of the public, and is encouraged in every possible way.

The publicity work of the service was continued and extended, mainly by means of Canadian Forest Week. The conduct of this special effort this year was marked by the closest co-operation yet achieved with the United States forest authorities, and by even greater enthusiasm and effort on the part of the press than in previous campaigns. The work in connection with the exhibitions was extended, as was also the lecture service to boys' and girls' camps.

During the year the Forest Products Laboratories underwent an extensive re-organization. The work carried on in the East in timber testing, wood preservation, timber physics, and timber pathology was transferred to Ottawa, where greatly enlarged accommodation was made available; the work in pulp and paper investigation was retained in Montreal. The Vancouver laboratory continued its work, especially along the line of timber conditioning. The increasing importance of the work of these laboratories in the industrial life of the country is manifested by a rapid and steady increase in the number of inquiries of a technical nature that are being received.

Water Power and Reclamation

International Waterway Matters.—The Minister of the Interior is charged with the responsibility of advising the Government with respect to international waterway problems and the Dominion Water Power and Reclamation Service has been called upon to devote much time to these matters. From the nature of the International Boundary line between Canada and the United States, there naturally arises a variety of waterway problems with respect to those waters through which the boundary runs, and to rivers and streams crossing the boundary. These questions continue to grow in number and in variety, and many of them are of vital import to the Dominion.

Each of the provinces along the boundary is confronted with one or more of these international waterway matters. British Columbia is interested in the proposed Columbia Valley Reclamation Project in the United States, with its influence on the water-powers of the Pend d'Oreille river, and in the matter of reclamation of Kootenay flats, with its influence on power and navigation. The Prairie Provinces are interested in the apportionment between the two countries for irrigation purposes of the waters of the St. Mary and Milk rivers and their tributaries; in the effect of drainage operations on the flooding of the Red and Roseau rivers; and in the Lake of the Woods, Rainy Lake and Upper Boundary Water storage problems with their influence upon the power resources of the lower Winnipeg river. Ontario and Quebec are vitally concerned with the problems arising along the Great Lakes and St. Lawrence Waterway system, including the diversion through the Chicago Sanitary canal, problems having to do with compensatory works at the lake outlets; with the preservation of Niagara falls; and with the proposed deep waterway. International waters such as lake Champlain and lake Memphremagog in southern Quebec, and the St. John river with its contingent power and storage problems, and the St. Croix river in the province of New Brunswick, also provide issues requiring investigation and, in some cases, international supervision.

International boards exercise control over the apportionment of the St. Mary and Milk rivers waters, over the regulation of lake of the Woods when the domestic storage range has been exceeded, over the regulation of lake Superior, over the apportionment of the water permitted to be diverted under the Boundary Waters Treaty at Niagara, over the withdrawal of water from the St. Lawrence at Massena and over the regulation of the flow of the St. Croix river. A special International board is also investigating the matter of preserving the scenic beauty of Niagara Falls and, consistent with such preservation, of determining what additional water might be permitted to be diverted for power purposes.

Water-power.—The past year was particularly noteworthy for the strides made in building up a power transmission system in southern Alberta; this system is based upon hydro-electric systems on the Bow river but is linked and exchanges power with several large steam plants which were already in existence. The system now embraces an area extending from Red Deer and Calgary in the north to Lethbridge and Macleod in the south and supplies many towns, villages and individual farms. It is expected that the system will shortly embrace the whole area from Edmonton to the International border and extend eastward to connect with other towns or systems which are being projected in Saskatchewan. Mining in northern Saskatchewan and Manitoba is rapidly progressing and the development of water power for mining purposes appears to be imminent. On the Winnipeg river in Manitoba the capacity of the three developed sites will shortly be reached and the development of further sites will be required to cope with the rapidly growing power load in Winnipeg and surrounding territory. In Canada as a whole there was no sign of any abatement in electrical development; hydro-electric installations increased during 1927 by 221,655 to 4,777,921 horse-power with work in progress that will increase this figure to 5,100,000 horse-power before the end of 1928.

Irrigation.—As precipitation during the growing season was considerably above normal throughout the Prairie Provinces, little irrigation was practised or required. The generous and well distributed rainfall provided ample moisture and all indications pointed to an abundant crop throughout the irrigation districts. These high expectations were however not entirely realized due to the unusually low temperatures experienced during September and recurring with greater intensity early in November, but on the whole production was well above average in the irrigation belt.

In addition to the major irrigation districts operating as units there is now a total area of 105,000 acres of land in Alberta and Saskatchewan irrigated by individual water users who have constructed and operate their own projects.

Fifty-one such applications were received during the year, the total number of these privately owned projects being about 1,500.

Drainage.—The drainage investigations carried out by this department during the past year have been restricted largely to inspections and surveys of small schemes. Supervision was maintained over the scheme of the McArthur Land Company Limited and the Western project of the Manitoba Dairy Farms Limited in Manitoba, the Waterhen Lake drainage district in Saskatchewan and the Low Water Lake drainage project in Alberta. An investigation of the large Eastern project of the Manitoba Dairy Farms Limited in southeastern Manitoba was carried out and the report and plans are now being prepared by the engineers. Satisfactory arrangements were made with the provinces of Alberta and Saskatchewan regarding fur-farming schemes. In connection with the provincial drainage schemes a considerable area of reclaimed Dominion land was disposed of to the provinces of Alberta and Saskatchewan under the provisions of the Dominion Drainage Regulations.

North West Territories and Yukon

Northwest Territories.—The revenue received under the administration of the Northwest Game Act increased from $34,195.50 in 1926-27 to $43,481.96 during the present fiscal year. The main item of increase was "Sale of Wolf Pelts," which brought in $23,364, as compared with $11,842 for the previous year.

The investigation of the resources of the region north of the provincial boundaries has been actively carried on. An important step was taken in the

work of conserving the musk-ox by the setting aside of an area of 15,000 square miles stretching from Artillery and Clinton-Colden lakes eastwards, on both sides of the Hanbury and Thelon rivers, to Beverley lake. There are no trading posts in this region which is known to contain some of the remaining musk-ox herds and the district is in every way an ideal sanctuary for wild-life. For three years the experiment of transferring plains buffalo from Wainwright park, Alberta, to Wood Buffalo park near Fort Smith, N.W.T., has been carefully watched. Its success has now been demonstrated. Two thousand more plains buffalo were transferred to Wood Buffalo park during the fiscal year. A reindeer investigation is also under way to ascertain with certitude to what extent these animals can be introduced into the Mackenzie district.

The usual annual patrol of the posts in the Eastern Arctic was carried out on the ss. *Beothic*. The expedition in charge of Mr. G. P. Mackenzie was engaged on this work for about seven weeks and accomplished all the purposes for which it set out.

The administration of the Northwest Territories covers Eskimo affairs, hospital and educational facilities, health of the natives, the issuing of permits and licences to trade. All these matters have received the increased attention which the growing importance of the territories warrants.

The inspectional work with regard to mining, petroleum and natural gas on Dominion lands in the Prairie Provinces as well as the Northwest Territories is conducted by this branch. Details regarding the progress in the various fields are given in the director's report in Section V.

The amount of coal mined from Dominion lands in Alberta increased from 6,508,908 tons to 6,936,780 tons, although the number of mines operating shows a decrease of 55. Operating mines in Saskatchewan reported an increased output of about 20,000 tons.

Yukon.—The prestige of the Yukon as a tourist land continues to grow. Last year over seven thousand tourists visited the territory, exclusive of the hunting parties who go north for big-game every autumn.

The progress of the territory in mining though not spectacular is steady and very satisfactory.* The administration of the territory as regards public health, schools, roads, navigation, etc., was carried on satisfactorily.

Observatories

Dominion Observatory, Ottawa

Observations on the regular meridian circle program were obtained on 185 days, covering 439 hours of right ascension. There were obtained 1,481 measurements of right ascension and declination of program stars, 962 of clock stars, 407 of azimuth stars, 61 of planets and 115 of the sun. Of nadir and other constants there were 949 sets of measurements and of underground azimuth marks 105.

The computations in connection with the international longitude program mentioned in the last report were completed. A mimeographed list of times of reception of wireless signals at Ottawa and Vancouver was distributed to the various co-operating observatories. A detailed report of the operations and results is being prepared for publication.

The time service, comprising 4 primary clocks, 15 secondary clocks, 595 minutes dials, 18 seconds dials, 2 tower clocks and various relays, chronographs and seismograph shutters, was maintained as usual. In addition to maintenance of Observatory equipment, 63 clocks, 97 watches and 10 chronometers were overhauled for other branches and departments. Wireless signals were received

* Mining in the Yukon is dealt with in the report of the Mining Lands Branch, Section I.

throughout the year from the United States, France, and Germany, and since January from Rugby, England. Wireless time signals are sent out daily through the local broadcasting station, and experimental work on short-wave transmission of these directly from the Observatory is being carried on.

An underground clock-vault was constructed during the year, and its equipment has been partially completed.

With the eighty-foot reflecting telescope and twenty-three foot spectrograph, 474 observations, each containing 9 strips of spectrum of solar limbs, centre, midway and comparison spectra, were photographed. Sunspots were recorded on 159 photographs of the solar disc with reference lines, and prints were supplied to the Radio Branch of the Department of Marine and Fisheries for the study of the effect of sunspots on radio. Over 500 spectrograms were measured, and 624 computations of radial velocity and heliographic positions were made. A statistical comparison of the Hudson's Bay Company's fur records with sunspots showed a striking relationship. An instrument for reading heliographic latitudes and longitudes of points observed spectroscopically, or of sunspots recorded on photographic plates, was designed and is under construction.

The spectrograph attached to the 15-inch equatorial telescope was used in further study of Cepheid variables and other interesting systems such as σ Scorpii and ε Aurigae. During the year 311 spectrograms were secured. The photo-electric photometer was also in regular use, and 89 observations were made. The light variations of several stellar systems were studied, and light curves for δ Cephei and η Aquilae were obtained. The observing program was so arranged that the same stars were studied with the spectrograph and the photometer. Work on variation of ionization in Cepheid variables was continued in collaboration with McGill University. As usual, the equatorial telescope was available on Saturday nights for observation by the public.

Observations were continued with the eight-inch doublet for determining the magnitudes of comparison stars in Cepheid fields, about one hundred plates being obtained. The short-focus triple camera was in use on every clear, moonless night for the determination of the light curves of some forty Cepheids, and about two hundred plates were secured. The measurement and reduction of the comparison stars have been continued, over twenty-five plates having been measured; the results are now being prepared for publication. The six- and eight-inch doublets were used also in following the Pons-Winnecke comet, and direct photographs were taken whenever possible.

During the year 333 earthquakes were recorded, of which 39 were reported to the press, and by telegram to Science Service, Washington. The more outstanding shocks occurred as follows: in Chile (April 14, 1927); in Alaska (October 24, 1927); and in Mexico (February 10, 1928, and March 22, 1928). The co-operative work in the province of Quebec, mentioned in the two immediately preceding reports, is under way. Records have been obtained at Shawinigan Falls since November, 1927, and at Seven Falls since August, 1927. The records at Seven Falls have been greatly interrupted, but the results already obtained show at least 12 earthquakes recorded there which have not appeared on the records at Ottawa. Continuous recording there will thus be of particular value. At the request of Harvard University, the seismologist was sent to that institution for a short time for the purpose of organizing the seismological work there. The Bibliographical Bulletin, mentioned in the last report, is growing through international co-operation. It continues to appear, as originally, in mimeographed form, but is being printed, in arrears, in the Bulletin of the Seismological Society of America.

Magnetic work was carried out in accordance with a program which was begun in 1924, and had for its object the securing of secular change data over

that part of the Dominion already covered by the magnetic survey. Observations for the determination of the three magnetic elements, declination, inclination and horizontal intensity, were made at seventy-two stations, fifty-six of which were occupied previously. The area covered is included between longitudes 78° W. and 131° W., the Canada-United States boundary, and latitude 56° N. Office work has included the computation of observations of the past season and the preparation of a publication covering the results of the period 1924-26.

Gravity observations were made at 16 stations, 6 of these being in Ontario, 1 in Quebec and the remaining 9 in Western Canada. In view of the increasing interest in the application of gravity and other geophysical methods to prospecting, some attention has been given to the problems involved, and, in collaboration with the Geological Survey, some tentative investigations have been planned.

Two of the regular series of Dominion Observatory publications were issued and distributed, Vol. 8, No. 8, Magnetic Results, 1921-1923, and Vol. 9, No. 4. The Spectroscopic System Nu Eridani. A number of papers have been presented to scientific societies and published in various journals; numerous scientific lectures have been given, and lantern slides have been loaned for illustration of lectures given in various places by amateur astronomers.

Dominion Astrophysical Observatory, Victoria, B.C.

This is the tenth annual report of the work of this institution, which commenced actual observations on May 6, 1918. The details of the work carried on are published in complete form in the publications of the observatory, of which four were issued during the year. Seven more are in press, being numbers 4 to 11 inclusive, of volume IV.

As in previous years, the whole time of the telescope, except two hours for visitors every Saturday evening, was devoted to photographing stellar and nebular spectra. The number of spectra obtained was 1,124 as compared with an average of 1,637 for the past nine years. Plates were secured on 182 nights, of which 102 might be classed as good, when 962 spectra were obtained, and 80 as fair to poor, when only 162 were secured. On several nights in addition, though the dome was opened and exposure started, no usable spectra were obtained. The actual number of hours observing was 997, as compared with a nine-year average of 1,244. Thus the year from the point of view of observing was decidedly below the average.

The program of observation of the B-type stars which has been under way for about four years is making satisfactory progress, and may possibly be completed in another year. About 500 spectrograms are yet required. Practically all the plates have been measured and about 135 spectroscopic binaries have been discovered in the course of the work. An interesting investigation carried out was an analysis of the radial velocities of all the O-type and B-type stars determined here as a test for the hypothesis of a galactic rotation as advanced by Lindblad and previously tested by Oort. To that end a complete catalogue of the velocities of all O-type and B-type stars observed here or elsewhere was compiled. The material was thus more complete and homogeneous than that of Oort and the distribution of the velocities of some 550 B-type and O-type stars strongly confirms the existence of a rotation of the sidereal system in the galactic plane around a distant centre in longitude 325°.

Considerable work remains yet to be done on the winter section of the A-type program. The spectra of about 900 A-type stars have now been secured but many of these require additional plates so that reliable values of the radial velocities may be obtained. Measurement has kept pace with observation. Some experimental work has been done in determining the intensities of absorption lines.

Nine spectroscopic orbits were completed during the year and revision made of one other. The orbits of the secondary components of two other binaries were also determined. A spectrophotometric determination of the continuous spectrum of *epsilon* Sagittarii showed that the metallic and not the helium spectrum was the fundamental one. Photometric observations of 12 Lacertae indicated that the periods of light and velocity variations were the same.

The origin and resulting velocities given by all the lines in the composite spectrum of Z Andromedae were determined. The diameter of the surrounding nebula and the temperature of the star were also derived and the physical nature of the system discussed from the observed data.

The wave lengths of the oxygen and nitrogen lines between λ3800 and λ4700 on third order grating plates have been measured. The study of the molecular spectrum of silver between λ3280 and λ3576 has also been undertaken with the hope of being able to determine the distance apart of the atomic nuclei.

Drawings to various scales of the solar and stellar systems were prepared for purposes of illustration. Graphs were also constructed to facilitate transformation from equatorial to galactic co-ordinates and for the determination of the distance and position angle of any star from the solar apex.

Including day visitors, about 30,000 people visited the observatory during the fiscal year.

Surveys Bureau

In general the work of surveying proceeded along the lines indicated in previous reports. The Geodetic Survey triangulation net was extended in northern British Columbia and across Vancouver island; in Alberta and Saskatchewan north towards Edmonton and east towards Battleford; in the Kirkland Lake mining area in Ontario; in the Rouyn mining area and the Gatineau valley and from St. Lawrence river to Chaleur bay in Quebec; and southwestward from Halifax in Nova Scotia. Four base lines incidental to this work were measured.

Precise levelling was carried on in five provinces and fundamental bench marks were established in four. In the office the precise level net of Canada was adjusted and the results of research work by members of the staff have provided material for the publication of several pamphlets. Progress is being made in the preparation of the results of precise levelling and these will eventually be issued in nine pamphlets of convenient size.

A mapping program, which has for its objective the preparation of a topographic map of Canada in map sheets of various scales depending upon the nature, needs and state of development of the areas mapped, was vigorously followed up by the Topographic Survey, surveys being made in eight provinces and in the Northwest Territories.

Aerial photography is now recognized as a very important aid to the usual ground methods of mapping. During the year an area of 45,850 square miles in ten localities was covered by aerial photography, necessitating the indexing of 62,000 photographs.

Legal surveys of Dominion lands were carried on as required. The results of the magnetic survey for declination were enriched by over 1,300 observations, the total number now on record being over 23,000. The facilities of the Physical Testing Laboratory in the examination, testing and repair of scientific instruments are increasingly used by Government departments and the public. An outstanding proof of this is the testing and standardization of thermometers of which 4,345 were dealt with during the year. A total of 60,077 maps, publications and official plans was distributed, being an increase of over 5 per cent above last year.

The boundary between Canada and the United States has a length of 5,500 miles and is probably the longest of its kind in the world. Constant inspection is necessary as monuments become displaced or are destroyed from time to time. Also the line becomes choked up with young trees which obscure the view between monuments. During the year the United States Section cleared the vista on the Quebec-Vermont boundary, and the Canadian Section that on the north line between New Brunswick and Maine.

After a tour of inspection in the west the Canadian Boundary Commissioner discussed with the Deputy Provincial Secretary of Manitoba at Winnipeg the question of the ratification of the federal Government's proposed action in presenting to Manitoba the two small water areas in the Northwest Angle inlet of lake of the Woods, which were transferred to Canada by the United States under the treaty of 1925, and also the question of permanently maintaining as a public reserve the road allowance along the International Boundary.

Natural Resources Intelligence Service

During the year there was a large increase in the demand for information regarding Canada's natural resources, especially with regard to information on the tourist and recreational resources. Over 3,150,000 cars entered Canada, during the past season, for periods varying from one day to six months. This is an increase of more than 50 per cent over the previous year and takes no account of the tourists who entered by boat or railway.

Maps, pamphlets, and recreational literature were distributed on a larger scale than before to all organizations interested in the development of tourist traffic. A series of blotters picturing the provincial capitals of the Dominion in contrast with their appearance of 1867, and carrying an invitation to visit Canada was widely distributed throughout the United States. Special articles, photographs, engravings and plates were furnished to newspapers, magazines and other periodicals. Assistance was given to papers publishing special editions featuring Canada's resources and their development. Routes of travel were outlined for individual inquiries and every endeavour made to furnish information which would be of assistance to those who travel, settle or otherwise interest themselves in the Dominion.

General Information

There are two main phases to the general information work of the service; first the continuous building up of all available and accurate data on Canada's resources and recreational and tourist attractions, and second, the wide and systematic distribution of this information in the most effective channels.

Assembling of Information on Canada's Resources.—As has been pointed out on former occasions, it is necessary to have readily available the most complete and up-to-date data that can be assembled, in order that the service may function most efficiently as a central bureau of information on Canada's natural resources. Prompt access to such data is provided by the Natural Resources Index which is a fundamental phase of the service's regular activity. The work of collecting the data and of classifying and recording them in such a manner as to be readily available in order to maintain and improve this index required a considerable amount of continuous detailed work during the year.

The land available for agriculture ranks first among the natural resources of Canada. For many years the work of supplying prospective settlers with adequate land information was met by the furnishing of economic, cereal, elevator, physical and climatic, vegetation and forest cover reports. Recently, however, many of the requests for information have been such as could not be

met by printed publications and which required special investigations in order to furnish the information desired. These requests have been varied and consisted of inquiries relative to climate, crop production, land settlement, railway and transportation facilities, etc.

Interest in Canada's fur resources, particularly in regard to fur-farming, continued to grow and requests for information regarding the various phases of this industry increased from month to month. These requests came not only from Canada but from the United States and Europe. The general interest in the various aspects of the fur industry is evidenced by the number of inquiries received. These included requests for information regarding prices, fur markets, pelting, trapping locations, regulations, royalties, bounties, etc., as well as the raising of the various fur-bearers in captivity.

As lack of proper information relative to the handling of raw furs is responsible for a very considerable loss in the value of the fur take, a booklet was compiled describing the best methods of preparing pelts for the market. This booklet was widely distributed to fur companies and to individuals, and so great was the demand that a second edition was necessary.

Tourist Information.—During the year requests for information of a recreational nature increased greatly. As usual every endeavour was made to give inquirers the best possible assistance in laying out their trips and planning their holidays.

Tourist maps and publications were in great demand from boards of trade, chambers of commerce and automobile clubs in the United States.

In connection with the World's Poultry Congress held in Ottawa, a number of descriptive automobile tours, with maps, were prepared for delegates coming from the United States. Copies of these descriptive tours, together with road maps and recreational literature, were sent to each delegate.

Many requests continued to be received from persons interested in canoeing as a holiday. Several new trips were prepared and added to the list already available.

A booklet "Vacations in Canada", containing the kind of information generally sought by the tourist who intends to visit Canada, was issued and widely distributed. In addition to general information on the recreational attractions in each of the provinces, the Northwest Territories, and the Yukon, this booklet gives specific information on motoring regulations in each of the provinces, a summary of the Canadian customs regulations regarding the entry of automobiles for touring, pleasure boats, tourists' outfits, and travellers' baggage; also a summary of the fishing, hunting and game regulations of the various provinces. Although available for a comparatively short time the booklet was very much in demand.

New and revised editions of the map of Canada and the United States and of the sectional maps showing the main connecting highways between the two countries were prepared and widely distributed. New editions were also prepared of the maps of Nova Scotia, New Brunswick, and Prince Edward Island showing the motor roads and recreational resources.

Distribution of Published Information.—During the year 416,570 maps and 187,989 reports and booklets were distributed, of which 323,861 were mailed to points within Canada, 270,752 went to the United States and 9,946 to other countries. Requests for information which could not be supplied by printed maps and literature totalled 40,301, an increase of 9,755 over the previous year, such interest being due to the interest in land settlement opportunities and the tourist attractions of Canada.

In the latter connection close co-operation was established with tourist bureaus, automobile clubs, tourists' camps, hotels, banks, fish-and-hunt, golf, country and social clubs, motor dealers, boards of trade, fraternal societies, educational institutions, libraries, the press and similar bodies in touch with prospective tourists. In this manner, the various maps and booklets of the service were placed in the hands of those in a position to derive the greatest benefit therefrom.

The completion of negotiations for the development of mining properties in Manitoba and Saskatchewan and the publicity following the announcement resulted in a marked demand for maps and reports pertaining to that section of the Dominion.

The facilities of the service to supply libraries with data regarding Canada's resources were placed before the annual convention of the American Library Association. The Immigration Bureau of the Overseas League in London was furnished with publications which would assist members who were contemplating settlement in Western Canada. An ex-officer of the French army was furnished with data to assist in organizing a project to purchase 10,000 acres of agricultural land in the western provinces. The officer in charge of Overseas Settlement at Army Headquarters, India, was furnished with quantities of reports and maps showing the attractions of the various provinces, to be placed with each British unit for the information of those going on the reserve or discharge list.

The service continued to issue the weekly news bulletin containing items relating to the Dominion's resources and their development. Material in the form of brief bulletins and short articles was supplied regularly to radio and broadcasting stations.

Development Investigations.—Investigation of opportunities for intensifying the development of natural resources within the Dominion required increased attention of the service. The number of inquiries from interested manufacturers and business corporations for both detailed and general information on problems associated with Canada's raw products increased considerably during the year. Although some of these inquiries could be answered by printed reports, economic maps, and other published material, there were very many which could not be dealt with in this manner but required special investigation.

As a result of the continuous demand for information of this nature, it has been necessary to undertake a definite program of investigation for the purpose of effecting a more intensive utilization of the domestic raw products within the Dominion. The prosecution of these investigations entailed a digest of information concerning the location and extent of raw materials, transportation, domestic and foreign markets, tariffs, taxes, royalties, patents, processes, machinery and all other such matters of special interest to the industry under review.

Among the investigations carried on during the past year, might be mentioned the leather, fertilizer, paperboard, and edible gelatine industries, the production of palm-kernel cake and oil, the production of oil from grape seeds, the textile industry of Canada, and the manufacture of porcelain products.

It might be mentioned that much of the investigatory work of this service is conducted, and in some cases initiated in co-operation with other branches of the public service.

Geographic and Economic Mapping.—The work of the Chief Geographer's office showed considerable progress in the geographic mapping of Canada. New editions of the land district maps were issued, one for each of the seven districts. Fourteen sheets of the standard geographic map of Canada were

revised and brought up to date and new editions published, as well as new editions of the maps of Manitoba, Saskatchewan and Alberta on a scale of 12½ miles to an inch. Considerable work was also done on the preparation of other sheets of the standard geographical map; a relief map of Canada on a scale of 60 miles to an inch; and maps of Quebec and the Maritime Provinces, Ontario, Manitoba, Saskatchewan and Alberta, and British Columbia, on a scale of 35 miles to an inch.

The work in economic, as distinct from geographic mapping, uses the latter maps as bases for maps showing the nature and distribution of the country's resources, the extent of their development, and a wide range of physical and economic data of aid in throwing light on the character and volume of Canadian national property from a development standpoint. The increased demand for accurate and useful tourist and recreational information necessitated the preparation of a number of maps showing such information.

Maps prepared or under preparation during the year included: Trade Routes Map of the World; Map of Dominion showing Vegetation and Forest Cover; Map of Dominion, scale 100 miles to an inch, showing Natural Resources and Transportation Routes; Land Maps of Manitoba, Saskatchewan, and Alberta; Maps of New Brunswick and Nova Scotia indicating Motor Roads and Recreational Resources; Maps showing main Automobile Roads between Canada and the United States; Map showing Commercial Development in Manitoba and part of Saskatchewan; Map showing Commercial Development in Central Canada. In addition to published maps, many maps were prepared for reproduction by line-engraving, blue-print, and other processes.

In addition to the preparation of maps for publication by the service, the mapping facilities were utilized by other branches of the Department, by other departments of the federal service and by many organizations requiring maps of an economic nature. Interest in the study of the economic geography of Canada has increased during recent years and every possible assistance was given to educational publishers, universities, newspapers, and others, both in Canada and abroad, by furnishing maps and such other material as would be of use in carrying on these important studies.

Technical Plant.—This plant, comprising photographic laboratories, blue-printing map-mounting, photostat, mimeograph, and other technical facilities, continued to give prompt service to the Department of the Interior and to other departments which made use of it from time to time, as well as to effect substantial savings over the costs which would have been entailed to the department if it were not so equipped. While the plant is maintained primarily to meet the Department's own requirements, it is used extensively by other public services, there being very few departments of the federal Government which do not take advantage of these facilities in one way or another.

In this plant is maintained the photographic and lantern slide library. Lantern slides are made up into sets and these along with lectures or lecture notes are loaned to educational and other institutions or organizations where they will be of assistance in the development of the natural resources of Canada. The demand for lantern slide lectures showed a steady increase during the year. A number of the lecture sets were revised and new lectures were added. A brief summary for the calendar year 1927 shows that 405 lectures were given in Ottawa, 400 at other points in Canada and 400 in centres outside Canada, chiefly in the United States, and in Great Britain. Eighty lectures reached fourteen different countries outside Canada and in addition one lecturer used "Canada, Coast to Coast" in upwards of twenty countries.

Photographic prints for reproduction purposes were furnished to newspapers and other periodicals in increasing numbers.

DETAILED STATEMENT OF SURVEYED AREAS IN MANITOBA, SASKATCHEWAN AND ALBERTA, JANUARY 1, 1928

—	Manitoba	Saskatchewan	Alberta	Total
	acres	acres	acres	acres
Area under homestead (including military homesteads)	8,311,400	29,003,400	19,066,900	56,381,700
Area under pre-emptions, purchased homesteads, sales, half-breed scrip, bounty grants, special grants swamp lands transferred to province of Manitoba, etc.	5,241,200	6,727,800	3,491,100	15,460,100
Area granted to railway companies	3,566,997	15,177,063	13,038,595	31,782,655
Area granted to Hudson's Bay Company	1,273,500	3,351,000	2,402,300	7,026,800
Area of School Land Endowment (1-18 of area surveyed in sections)	1,637,800	3,944,400	3,760,500	9,342,700
Area sold subject to reclamation by drainage	89,762	57,600	39,400	186,762
Area sold under irrigation system	.....	77,000	989,800	1,066,800
Area under timber berths (leased)	1,453,500	607,300	2,131,100	4,191,900
Area under grazing leases	62,400	3,232,200	2,953,100	6,247,700
Area of forest reserves and parks	2,488,500	6,239,000	17,072,100	25,799,600
Area reserved for forestry, parks and for pulpwood purposes (inside surveyed tract)	2,453,000	1,637,000	2,085,000	6,175,000
Area of road allowances	977,244	1,468,743	1,288,882	3,734,869
Area of parish and river lots	529,087	84,132	121,221	734,440
Area of Indian reserves	484,517	1,166,114	1,406,291	3,056,922
Area of Indian reserves surrendered	89,006	404,549	329,964	823,519
Area of water-covered lands (inside surveyed tract)	4,260,220	1,904,009	2,296,448	8,460,677
Area undisposed of (surveyed)	4,218,000	3,532,000	15,417,000	23,167,000
Totals	37,136,133	78,613,310	87,889,701	203,639,144

STATEMENT OF LANDS SALES BY RAILWAY COMPANIES HAVING GOVERNMENT LAND GRANTS AND BY THE HUDSON'S BAY COMPANY

Year	Hudson's Bay Company		Canadian Pacific Railway Company		Manitoba Southwestern Colonization Railway Company		Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company	
	acres	amount	acres	amount	acres	amount	acres	amount
				$		$		$
1893	.....	.....	93,184	295,288	14,164	57,559	1,603	.....
1894	7,526	48,225	43,155	131,628	6,312	280,003	640	.....
1895	4,341	23,209	55,453	176,950	5,623	22,330	2,391	.....
1896	9,299	52,410	66,624	220,360	21,254	88,568	286	.....
1897	10,784	53,277	135,681	431,095	63,800	634,644	2,524	.....
1898	62,000	310,000	242,135	757,792	106,473	363,982	22,534	.....
1899	56,875	274,625	261,832	814,857	58,019	199,558	61,030	178,517
1900	70,196	352,631	379,091	1,152,836	133,507	437,449	18,932	53,974
1901	82,308	399,804	339,985	1,046,665	59,749	214,953	22,266	74,810
1902	269,577	1,412,332	1,362,478	4,440,500	206,411	713,365	39,835	147,365
1903	330,046	1,939,804	2,260,722	8,472,250	250,372	699,210	843,900	1,476,900
1904	144,857	879,910	857,474	3,516,864	29,522	113,303	.....	.....
1905	139,721	865,905	411,451	2,045,800	80,342	296,936	.....	.....
1906	236,191	1,863,375	1,012,322	6,015,060	83,418	360,889	.....	.....
1907*	69,158	742,221	851,083	4,817,682	3,051	22,645	1,353	16,789
1908	21,184	267,215	81,060	727,367	31,982	153,007	5,621	68,869
1909	25,449	288,836	29,331	383,390	10,396	84,845	37,662	380,371
1910	104,382	1,297,454	655,585	10,473,425	14,501	126,950	106,000	964,600
1911	267,038	3,747,768	715,095	10,372,661	20,313	284,859	113,533	1,237,204
1912	42,554	808,943	855,280	12,420,488	18,932	117,497	35,213	495,116
1913	53,581	1,128,806	447,158	6,348,352	2,768	48,639	15,395	255,399
1914	26,292	572,837	263,962	4,242,089	7,626	91,948	1,629	21,546
1915	16,400	306,550	151,262	2,496,872	489	5,508	1,292	19,118
1916	79,310	1,273,144	242,215	3,670,421	4,780	58,808	12,246	180,361
1917	254,941	4,234,244	405,764	6,612,040	12,470	165,245	21,533	331,596
1918	386,394	6,914,947	545,284	11,044,883	25,933	321,005	49,723	783,062
1919	285,561	4,978,950	602,555	10,580,669	5,289	67,214	33,838	527,670
1920	276,629	4,724,941	571,571	11,356,146	4,623	56,760	32,095	474,895
1921	178,301	3,037,369	275,636	5,898,994	1,518	20,058	11,432	160,472
1922	33,595	545,611	101,497	1,732,350	1,519	15,497	1,274	22,315
1923	24,976	366,257	83,485	1,248,968	373	5,107	1,122	17,000
1924	33,434	456,386	45,911	775,205	637	3,822	6,242	92,145
1925	84,758	1,117,618	91,295	1,602,524	1,701	13,890	1,925	28,571
1926	184,595	2,276,129	168,988	2,263,919	3,723	31,043	7,623	115,603
1927	282,670	3,414,539	249,497	2,979,958	3,695	27,043	9,985	142,968
1928	289,713	3,546,598	387,034	4,349,779	4,910	46,256	7,888	93,833
Totals	4,447,726	54,522,870	15,342,136	145,916,072	1,300,195	5,598,295	1,530,565	8,361,069

*Nine months to March 31.

STATEMENT OF LANDS SALES BY RAILWAY COMPANIES HAVING GOVERNMENT LAND GRANTS AND BY THE HUDSON'S BAY COMPANY—*Concluded*

Year	Calgary and Edmonton Railway Company		Canadian Northern Railway Company		Great Northwest Central Railway Company		Total		Average per acre for all Railways
	acres	amount	acres	amount	acres	amount	acres	amount	
		$		$		$		$	$ c.
1893....	11,260	.....	.....	.....	.....	.....	120,211	352,847	2 93
1894....	11,035	.....	.....	.....	.....	.....	68,668	207,856	3 02
1895....	46,815	.....	.....	.....	.....	.....	114,713	222,489	1 94
1896....	10,553	.....	.....	.....	.....	.....	108,016	361,338	3 34
1897....	9,436	.....	.....	.....	.....	.....	222,225	719,016	3 23
1898....	15,481	.....	.....	.....	.....	.....	448,623	1,431,774	3 18
1899....	24,738	53,335	.....	.....	.....	.....	462,494	1,520,792	3 28
1900....	46,653	128,256	.....	.....	.....	.....	648,379	2,125,146	3 27
1901....	116,719	352,037	.....	.....	.....	.....	621,027	2,088,269	3 36
1902....	323,494	1,033,396	.....	.....	.....	.....	2,201,795	7,746,958	3 56
1903....	231,800	909,600	183,736	631,503	128,435	522,490	4,229,011	14,651,757	3 46
1904....	129,007	563,507	64,469	313,575	41,858	177,081	1,267,187	5,564,240	4 39
1905....	109,191	512,898	231,707	1,221,469	17,593	103,564	990,005	5,046,572	5 09
1906....	85,784	480,063	204,966	1,014,351	20,003	137,503	1,642,684	9,871,241	6 01
1907*...	59,515	346,064	289,576	1,711,109	4,023	41,470	1,237,759	7,697,930	6 02
1908....	8,606	75,644	196,946	1,746,504	1,294	13,855	346,693	3,052,461	8 80
1909....	6,370	66,508	.....	.....	165	7,935	109,373	2,211,885	11 08
1910....	18,323	182,926	285,428	2,783,010	571	6,863	1,184,790	15,835,228	13 36
1911....	11,820	116,231	277,414	3,336,797	1,438	27,417	1,406,651	19,122,937	13 59
1912....	10,853	154,424	365,926	4,216,578	632	11,373	1,329,390	18,224,419	13 70
1913....	4,155	44,212	182,491	2,009,642	1,601	32,105	707,149	9,867,155	13 95
1914....	13,575	460,129	182,491	2,009,642	.....	.....	501,575	7,398,191	14 75
1915....	23,042	444,018	.....	.....	316	6,956	192,801	3,279,031	17 01
1916....	11,689	172,033	.....	.....	4,646	81,182	354,886	5,435,949	15 32
1917....	33,821	573,875	17,796	298,938	8,829	141,439	755,154	12,357,377	16 35
1918....	53,335	815,628	39,546	732,351	16,021	275,724	1,116,237	20,887,600	18 71
1919....	31,774	479,496	65,110	1,261,963	14,530	252,774	1,038,657	18,148,736	17 47
1920....	26,953	425,656	86,305	1,685,241	27,981	464,586	1,026,157	19,188,225	18 69
1921....	11,681	191,928	69,934	1,455,319	5,128	96,616	553,630	10,860,756	19 61
1922....	3,024	51,603	14,163	263,199	167	2,997	155,239	2,633,572	16 96
1923....	1,013	15,552	11,214	190,112	1,120	21,368	123,303	1,864,364	15 12
1924....	1,283	14,144	71,489	1,103,421	799	14,934	159,795	2,460,057	15 39
1925....	8,499	132,504	56,981	770,680	2,246	35,151	247,405	3,700,938	14 95
1926....	10,145	93,642	79,088	1,127,973	3,660	45,907	457,822	5,954,216	13 01
1927....	8,658	96,799	107,511	1,586,850	4,463	47,531	666,479	8,295,685	12 45
1928....	17,162	205,695	67,714	924,018	9,183	93,582	783,604	9,259,759	11 82
Totals..	1,553,262	9,191,803	3,152,001	32,394,245	316,702	2,662,412	27,639,587	258,646,766	9 35

*Nine months to March 31.

ACCOUNTS BRANCH

DEPARTMENTAL REVENUE

STATEMENT of Gross Cash Receipts From all Sources for the Fiscal Year 1927-28 Compared with the Receipts for the Previous Fiscal Year

Source of Revenue	1927-28	1926-27	Increase	Decrease	Net increase
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Dominion lands.....	3,763,408 56	3,418,553 95	344,854 61	.....	
School lands.....	2,085,300 76	1,567,547 79	517,752 97	.....	
Ordnance lands.....	14,221 02	30,797 07	.....	16,576 05	
Seed grain and relief.....	313,193 83	310,807 97	2,385 86	.....	
Registrar's fees.....	350 79	453 19	.....	102 40	
Fines and forfeitures.....	3,622 98	4,592 45	.....	967 47	
Casual revenue.....	14,378 32	42,139 86	.....	27,761 54	
Totals.....	6,194,476 26	5,374,892 28	864,993 44	45,409 46	819,583 98

STATEMENT of Cash Receipts on Account of Dominion Lands Revenue for the Fiscal Year 1927-28 Compared With the Receipts of the Previous Fiscal Year

Particulars	1927-28	1926-27	Increase	Decrease	Net Increase
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Homestead fees	72,551 00	57,700 00	14,851 00		
General sales	91,381 39	45,991 92	45,389 47		
Pre-emption sales	597,250 13	457,225 98	140,024 15		
Purchased homestead sales	32,660 54	25,614 15	7,046 39		
Improvements	46,736 39	44,162 20	2,574 19		
Patent and Interchange	141 91	240 00	201 91		
Survey fees		271 34		271 34	
Rentals of land	18,939 05	17,239 08	1,699 97		
Map sales, office fees, etc	34,467 59	28,774 45	5,693 14		
Suspense account	2,888 07	1,111 98	1,776 09		
Liquor permit fees	677 75	413 90	263 85		
Trader's licences	4,845 00	5,265 00		420 00	
Trapper's licences	14,582 00	16,386 00		1,804 00	
Marriage licences	2 00		2 00		
Radio fees	2 50	2 00	0 50		
Bird licences	25 00	20 00	5 00		
Fur sales	22,271 00	11,625 67	10,645 33		
Billiard licences	175 00	275 00		100 00	
Trading Post licences	173 25	39 00	134 25		
Miscellaneous	8,707 43	4,902 18	3,805 25		
Taxidermists licences, etc	113 25	161 15		47 90	
Timber dues	1,388,140 48	1,190,974 61	197,165 87		
Grazing rental	150,700 26	150,326 77	373 49		
Grazing fees	10,344 30	11,770 12		1,425 82	
Grazing improvements	13,235 36	9,247 15	3,988 21		
Hay permits	13,449 04	14,623 26		1,174 22	
House rental	2,192 73		2,192 73		
Irrigation fees	412 81	970 00		557 19	
Irrigation sales	11,031 70	15,989 89		4,958 19	
Sale of trees, etc	18,687 62	17,674 69	1,012 93		
Fishing permits	1,598 85	2,269 50		670 65	
Ice permits	93 00	78 00	15 00		
Rent of water-power	50,417 00	31,336 41	19,080 59		
Coal lands	415,532 65	414,843 90	688 75		
Mining fees	127,580 00	87,090 41	40,489 59		
Dredging leases	4,644 61	5,898 30		1,253 69	
Petroleum leases	298,445 99	478,150 45		179,704 46	
Hydraulic leases	1,573 89	2,965 00		1,391 11	
Quarrying leases	7,400 27	6,130 04	1,270 23		
Potash and alkali leases	1,496 19	2,509 04		1,012 85	
Tar sand lease	124 58	116 40	8 18		
Sand stone and gravel permits	139 00	160 00		21 00	
Quartz leases	7,358 59	7,435 18		76 59	
Quartz sales		51 65		51 65	
Export tax on gold	14,205 55	12,437 64	1,767 91		
Free certificates for export of gold	4 50	6 50		2 00	
Antelope park	576 00	642 00		66 00	
Buffalo park	80,124 31	64,131 50	15,992 81		
Elk Island park	181 50	218 00		36 50	
Fort Anne park	11 25		11 25		
Glacier park	138 16	168 85		30 69	
Jasper park	32,808 22	20,368 20	12,440 02		
Point Pelee park	89 00	491 82		402 82	
Rocky Mountains park	143,467 64	137,227 00	6,240 64		
Waterton Lakes park	5,883 73	5,376 55	507 18		
Yoho park	3,655 83	2,338 57	1,317 26		
Kootenay park	8,096 20	7,030 30	1,065 90		
Brereton Lakes park	20 00	30 00		10 00	
Historic sites	6 00	34 25		28 25	
Hawke Lake		20 00		20 00	
Lake Florence	55 00		55 00		
Prince Albert park	36 50		36 50		
Revelstoke park		1 00		1 00	
Vidal Point park	80 00		80 00		
	3,762,928 56	3,418,553 95	539,912 53	195,537 92	
Refunds	74,333 97	91,280 73		16,946 76	
	3,688,594 59	3,327,273 22	539,912 53	178,591 16	361,321 37

STATEMENT Showing Receipts on Account of Dominion Lands From July 1, 1872, to March 31, 1928

Fiscal Year	Homestead Fees	Pre-emption Fees	Improvements	Sales		Map sales, Office and Registration Fees	Dominion Lands Surveyors' Examination Fees	Rents, Survey Fees, Miscellaneous, and Suspense Account	Purchased, Homestead Inspection, Cancellation and Sundry Fees	Timber Dues
				Cash	Scrip					
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872–73	6,960 00	.....	.....	19,170 20	.....	.....	.....	.....	.....	109 25
1873–74	7,310 00	.....	.....	19,834 75	.....	.....	.....	125 50	.....	2,710 55
1874–75	11,510 00	.....	.....	13,666 90	.....	129 00	.....	.....	.....	2,335 25
1875–76	4,680 00	.....	.....	3,478 94	320 00	.....	.....	.....	.....	387 00
1876–77	2,250 00	.....	.....	1,085 86	136,955 16	4 00	.....	100 00	40 00	320 00
1877–78	14,540 00	.....	.....	2,794 86	120,159 54	.....	180 00	.....	290 00	1,620 00
1878–79	17,690 00	.....	.....	4,998 39	210,904 84	81 00	310 00	13 70	410 00	325 00
1879–80	41,255 00	10,241 43	.....	45,708 97	81,685 86	245 40	580 00	183 25	1,780 00	25,121 46
1880–81	20,450 00	10,801 75	269 00	71,170 17	70,828 30	985 40	420 00	37 58	.....	32,028 34
1881–82	54,155 00	39,843 90	1,758 00	1,240,328 27	50,590 84	3,036 45	890 00	58 10	.....	58,753 14
1882–83	73,015 00	54,725 00	7,114 91	516,092 21	33,638 40	3,109 50	890 00	501 77	.....	90,066 46
1883–84	41,580 00	28,810 00	2,596 11	424,863 36	40,919 67	1,289 55	530 00	45,766 53	1,713 45	147,983 10
1884–85	25,645 00	17,100 00	2,328 75	199,275 32	45,875 60	1,621 82	370 00	50,068 57	2,685 00	87,474 99
1885–86	26,110 00	14,371 00	1,101 50	76,140 41	214,657 97	1,339 34	360 00	20,070 00	5,025 00	64,820 31
1886–87	19,614 00	6,887 93	1,971 55	48,175 76	337,640 19	1,171 39	240 00	44,561 00	7,778 40	65,111 74
1887–88	23,691 00	4,830 00	1,918 35	52,238 36	313,522 67	1,660 75	240 00	20,591 41	12,078 53	94,964 55
1888–89	39,460 00	10,550 00	4,128 48	57,513 16	318,238 57	1,410 16	220 00	10,389 57	20,402 50	90,290 00
1889–90	35,920 00	8,580 00	3,250 54	54,896 85	228,744 47	2,099 07	190 00	3,316 23	21,715 00	84,642 95
1890–91	29,164 10	.....	6,302 61	91,664 98	171,425 14	1,854 78	88 00	7,951 05	16,790 00	102,902 71
1891–92	46,994 00	.....	6,472 31	111,651 01	97,822 41	2,147 31	135 00	29,898 49	27,964 00	106,461 35
1892–93	37,689 74	.....	7,113 50	96,171 67	77,231 18	975 20	82 00	18,509 35	22,015 50	105,865 24
1893–94	36,462 26	.....	3,497 76	53,254 71	27,840 96	973 11	.....	13,457 09	11,097 00	81,290 51
1894–95	29,664 88	.....	3,567 90	37,293 71	23,269 62	695 99	40 00	6,271 77	6,566 90	74,079 20
1895–96	18,278 00	.....	3,163 15	46,373 98	46,929 65	610 78	50 00	21,679 31	6,810 50	61,923 47
1896–97	21,179 00	.....	3,737 01	49,335 53	16,929 38	795 05	70 00	11,129 72	8,527 50	68,992 82
1897–98	34,780 00	.....	5,649 63	80,178 64	28,918 14	1,987 40	10 00	15,376 53	15,859 88	119,313 78
1898–99	58,235 00	.....	4,297 62	116,594 35	21,307 58	1,266 05	20 00	67,450 95	20,850 40	155,360 63
1899–1900	72,690 00	.....	4,835 81	103,247 58	88,756 22	1,258 85	190 00	31,154 04	21,688 00	126,345 82
1900–01	79,910 00	.....	5,213 22	40,360 93	326,270 03	3,874 14	165 00	70,499 54	12,874 00	209,399 32
1901–02	144,425 00	.....	8,481 46	66,950 21	169,767 13	5,792 96	370 00	71,993 30	663 00	207,790 90
1902–03	320,409 65	.....	11,829 08	155,537 49	158,452 66	5,911 96	365 00	125,128 66	595 00	470,916 93

1903–04	255,772 36	.....	15,119 47	196,750 15	189,705 08	5,549 13	463 50	81,246 46	1,081 00	397,344 33
1904–05	304,806 25	.....	21,571 25	154,128 04	19,644 59	4,879 13	906 50	144,854 31	1,271 00	266,951 46
1905–06	417,834 25	.....	31,795 19	442,588 69	7,654 57	6,042 34	474 00	141,345 30	1,046 25	292,684 53
1906–07 (9 months)	215,449 55	.....	39,763 63	503,202 44	11,349 89	5,449 06	420 00	60,450 99	685 00	379,476 32
1907–08	301,693 73	.....	71,139 47	656,303 03	92,311 24	7,727 29	690 00	148,914 00	1,283 50	473,608 94
1908–09	389,039 00	141,550 15	70,928 86	951,442 28	20,136 27	7,296 55	1,040 00	75,596 96	9,579 50	269,837 52
1909–10	415,232 00	174,250 00	105,009 07	1,239,037 33	9,973 84	9,135 49	1,500 00	99,967 27	14,028 30	377,856 45
1910–11	445,135 00	156,485 00	143,227 13	1,193,756 04	1,437 84	8,730 01	1,310 00	42,111 92	20,142 85	387,054 96
1911–12	391,703 12	102,070 00	184,825 92	1,967,182 85	3,256 99	11,239 14	1,400 00	44,280 89	14,745 50	400,668 61
1912–13	337,055 00	85,940 00	168,904 42	1,650,491 87	6,157 27	14,483 91	1,040 00	17,866 65	11,380 00	463,738 75
1913–14	317,412 00	61,660 00	187,052 46	1,303,587 54	240 00	16,056 07	1,350 00	40,148 65	8,402 00	378,365 33
1914–15	238,295 00	28,720 00	114,982 17	696,672 23	80 00	14,290 23	970 60	33,234 14	4,776 10	310,934 29
1915–16	170,350 00	22,760 00	112,782 70	1,090,842 36	.....	11,485 83	470 00	19,495 98	3,475 00	378,960 68
1916–17	112,110 20	14,690 00	112,711 33	2,707,203 99	332 61	13,976 95	560 00	21,212 91	2,910 00	429,403 09
1917–18	83,180 00	7,870 00	89,371 59	3,046,091 55	131 47	12,066 22	250 00	26,513 84	2,200 00	482,006 25
1918–19	42,190 00	.....	49,225 97	2,192,860 81	323 41	11,039 54	100 00	77,291 91	360 00	408,728 28
1919–20	67,460 00	.....	78,913 74	2,799,605 09	80 00	17,134 19	255 00	28,535 19	340 00	589,780 21
1920–21	53,880 00	.....	70,492 66	1,721,171 61	.....	16,333 67	200 00	23,149 23	370 00	705,313 77
1921–22	73,540 00	.....	56,084 83	761,849 89	.....	23,352 07	170 00	26,285 90	3,713 00	683,490 99
1922–23	53,460 00	.....	36,847 94	414,278 96	900 00	21,414 16	180 00	20,848 43	6,187 40	825,465 05
1923–24	38,640 00	.....	31,930 25	404,952 00	160 00	15,652 17	20 00	25,791 21	8,131 73	847,772 60
1924–25	36,590 00	.....	37,738 73	410,221 58	611 80	16,115 57	10 00	28,637 37	17,072 05	981,399 60
1925–26	46,900 00	.....	46,330 00	467,600 87	.....	19,473 96	.....	41,760 21	18,808 10	1,098,692 53
1926–27	57,700 00	.....	53,409 35	544,873 59	.....	28,744 45	.....	35,150 25	22,640 90	1,190,974 61
1927–28	72,551 00	.....	59,971 75	732,323 76	.....	34,467 59	.....	54,998 28	20,924 41	1,388,140 48
Totals	6,333,695 09	1,002,736 16	2,090,728 13	32,149,066 08	3,824,089 05	398,491 13	20,784 60	2,045,971 26	441,773 15	17,148,356 40

STATEMENT Showing Receipts on Account of Dominion Lands From July 1, 1872, to March 31, 1928—*Continued*

Fiscal Year	Grazing Lands		Hay, Coal, Mining Fees, Stone Quarries, Export Tax on Gold, etc.		National Parks of Canada	Colonization Lands		Gross Revenue	Refunds	Net Revenue
	Cash	Scrip	Cash	Scrip		Cash	Scrip			
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1872–73								26,239 45		26,239 45
1873–74								29,980 80		29,980 80
1874–75								27,641 15		27,641 15
1875–76								8,865 94		8,865 94
1876–77								140,755 02		140,755 02
1877–78								139,584 40		139,584 40
1878–79								234,732 93		234,732 93
1879–80								206,801 37	4,636 08	202,165 29
1880–81								206,990 54	5,038 22	201,952 32
1881–82	2,245 00		40 00			354,036 17		1,805,734 87	10,687 55	1,795,047 32
1882–83	22,844 43		913 91			248,492 01		1,051,403 60	8,746 05	1,042,657 55
1883–84	11,370 60		640 90			253,713 40		1,001,776 67	9,220 50	992,556 17
1884–85	17,089 75		815 63			1,214 22		451,564 65	12,070 85	439,493 80
1885–86	29,562 51	3,131 08	1,284 83					457,973 95	63,389 12	394,584 83
1886–87	14,242 77	39,487 67	1,570 40	80 00				588,532 80	19,543 16	568,989 64
1887–88	5,922 47	23,023 28	2,273 73	80 00	2,951 58		10,000 00	569,986 68	6,277 66	563,709 02
1888–89	2,207 69	16,802 63	3,946 55		2,528 73		16,000 00	594,088 04	5,226 23	588,861 81
1889–90	1,305 57	9,021 63	9,242 08		1,094 37			464,018 76	8,209 74	455,809 02
1890–91	3,079 55	16,193 77	8,628 44	160 00	2,397 35	5 28	4,460 50	463,068 26	7,195 27	455,872 99
1891–92	3,726 80	17,222 60	5,616 85		3,648 45			459,760 58	15,291 39	444,469 19
1892–93	6,38 80	11,542 39	6,266 13		4,983 23			394,825 93	18,314 97	376,510 96
1893–94	5,740 79	7,687 86	6,243 15		2,523 92			250,069 12	4,544 01	245,525 11
1894–95	5,353 72	8,628 00	5,229 54		2,321 87			202, 83 10	4,365 99	198,617 11
1895–96	7,071 86	6,255 90	5,813 51		2,734 82			227,694 93	8,368 79	219,326 14
1896–97	4,715 01	2,500 00	8,633 68		2,132 11			198,676 81	6,833 78	191,843 03
1897–98	4,728 58	510 39	699,383 01		3,045 65			1,009,741 63	4,678 55	1,005,063 08
1898–99	5,245 88		1,130,705 70		2,994 16			1,584,328 32	32,296 39	1,552,031 93
1899–1900	8,382 86	4,083 30	1,038,362 92	20 00	2,727 65			1,503,743 05	23,062 28	1,480,680 77
1900–01	4,726 28	14,671 99	1,102,127 33	20 00	4,047 31			1,874,159 09	18,368 85	1,855,790 24
1901–02	7,292 46	8,409 27	737,882 43		*2,861 13			1,432,679 25	27,165 55	1,405,513 70
1902–03	13,911 73	15,041 33	607,723 65		*5,063 69			1,890,886 83	21,519 84	1,869,366 99
1903–04	19,790 27	13,921 29	495,583 18		*9,498 48			1,681,824 70	36,721 75	1,645,102 95

1904–05	36,145 32	5,237 36	364,927 59	.....	*14,059 55	.....	.....	1,339,382 35	25,786 90	1,313,595 45
1905–06	51,583 89	80 00	297,302 44	.....	18,883 83	.....	.....	1,709,315 28	33,418 36	1,675,896 92
1906–07 (9 months)	43,711 91	400 00	214,257 10	.....	*15,887 42	.....	.....	1,490,503 31	35,117 48	1,455,385 83
1907–08	43,211 78	4,048 01	266,415 31	.....	27,232 87	.....	.....	2,094,579 17	115,080 04	1,979,499 13
1908–09	53,312 79	3,257 84	253,339 17	.....	31,321 20	.....	.....	2,277,678 09	102,463 78	2,175,214 31
1909–10	67,807 01	5,081 47	459,870 29	.....	43,697 61	.....	.....	3,022,446 13	121,431 15	2,901,014 98
1910–11	60,702 80	2,356 00	774,569 27	.....	69,054 59	.....	.....	3,306,073 41	198,689 47	3,107,383 94
1911–12	69,519 41	1,520 00	729,126 56	.....	56,497 74	.....	.....	3,978,036 73	197,631 35	3,780,405 38
1912–13	79,412 76	.....	779,695 53	1,587 32	37,448 72	.....	.....	3,655,202 20	246,105 26	3,409,096 94
1913–14	84,926 15	320 00	865,499 12	.....	48,800 33	.....	.....	3,313,819 65	277,309 33	3,036,510 32
1914–15	101,710 58	400 00	1,594,905 42	.....	37,895 97	.....	.....	3,177,866 73	317,764 75	2,860,101 98
1915–16	118,955 02	160 00	476,408 82	.....	37,493 53	.....	.....	2,443,639 92	143,942 57	2,299,697 35
1916–17	128,341 50	.....	600,934 13	.....	45,851 45	.....	.....	4,190,238 16	134,243 14	4,055,995 02
1917–18	125,300 69	240 00	630,427 95	.....	52,160 52	.....	.....	4,557,810 08	113,680 44	4,444,129 64
1918–19	148,179 55	.....	630,975 74	.....	55,006 72	.....	.....	3,616,281 93	76,031 02	3,540,250 91
1919–20	183,661 96	.....	896,413 40	.....	76,742 07	.....	.....	4,738,920 85	116,249 03	4,622,671 82
1920–21	183,756 97	.....	1,234,558 49	.....	76,850 09	.....	.....	4,086,076 49	130,750 93	3,955,325 56
1921–22	144,344 67	.....	1,071,395 56	.....	74,302 68	.....	.....	2,918,529 59	119,079 58	2,799,450 01
1922–23	153,697 11	.....	823,183 50	.....	75,304 59	.....	.....	2,431,767 14	83,151 71	2,348,615 43
1923–24	141,871 05	.....	723,762 59	.....	115,163 42	.....	.....	2,353,847 02	71,983 12	2,281,863 90
1924–25	149,070 38	.....	639,749 23	.....	176,650 46	.....	.....	2,493,866 77	102,880 70	2,390,986 07
1925–26	166,387 97	.....	793,357 73	.....	180,886 12	.....	.....	2,880,197 49	76,684 27	2,803,513 22
1926–27	162,096 89	.....	1,084,694 72	.....	238,239 19	.....	.....	3,418,553 95	91,280 73	3,327,273 22
1927–28	161,044 56	.....	963,164 14	480 00	275,342 59	.....	.....	3,763,408 56	74,333 97	3,689,074 59
Totals	2,865,690 10	241,235 06	23,047,861 35	2,427 32	1,938,327 76	857,461 08	30,460 50	94,439,154 22	3,386,861 65	91,052,292 57

*Including scrip.

STATEMENT Showing the Yearly Gross Cash Revenue From All Sources From April 1, 1908, to March 31, 1928

Fiscal Year	Dominion Lands	School Lands	Seed Grain	Ordnance Lands	Fines and Forfeitures
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1908–09	2,254,283 98	687,422 74	53,590 86	205,749 96	281 00
1909–10	3,007,390 82	1,292,259 95	175,152 72	189,902 48	211 00
1910–11	3,302,279 57	1,614,733 93	153,351 14	6,009 34	4,052 22
1911–12	3,973,259 74	1,594,533 96	119,634 13	11,566 46	10,510 48
1912–13	3,647,457 61	1,621,508 11	171,342 87	60,607 80	7,150 35
1913–14	3,313,259 65	1,215,822 37	176,736 89	5,805 98	7,888 50
1914–15	3,177,386 73	943,717 00	68,263 56	4,416 64	5,828 00
1915–16	2,443,479 92	934,965 37	2,525,528 50	5,997 98	3,075 21
1916–17	4,189,905 55	1,699,370 06	3,652,729 05	5,553 26	2,184 72
1917–18	4,557,438 61	2,836,216 40	2,613,708 67	7,929 75	3,686 00
	33,866,142 18	14,440,549 89	9,710,038 39	503,539 65	44,867 48
1918–19	3,615,958 52	5,087,875 81	1,378,275 76	4,819 27	35 00
1919–20	4,738,840 85	3,900,091 75	1,155,354 64	9,840 33	70 00
1920–21	4,086,076 49	4,480,270 67	773,200 67	8,887 88	1,139 75
1921–22	2,918,529 59	2,335,726 83	372,350 89	8,446 48	2,912 73
1922–23	2,430,867 14	1,538,449 98	254,802 23	6,132 79	3,075 46
1923–24	2,353,687 02	1,511,518 09	274,227 20	57,505 97	2,467 56
1924–25	2,493,254 97	1,468,627 43	298,684 22	16,474 10	3,398 86
1925–26	2,880,197 49	2,052,415 11	309,646 01	13,045 18	2,613 87
1926–27	3,418,553 95	1,567,547 79	310,807 97	30,797 07	4,592 45
1927–28	3,763,408 56	2,085 300 76	313,193 83	14,221 02	3,622 98
	32,699,374 58	26,027,824 22	5,440,543 42	170,170 09	23,928 66
Decreases	1,166,767 60	.....	4,269,494 97	333,369 56	20,938 82
Increase	.....	11,587,274 33	.....	.....	

STATEMENT Showing the Yearly Gross Cash Revenue From All Sources From April 1, 1908, to March 31, 1928—*Concluded*

Fiscal Year	Registration Fees	Casual Revenue	Chinese Immigration Revenue	Total
	$ cts.	$ cts.	$ cts.	$ cts.
1908-09	1,352 13	26,224 29	.....	3,228,904 96
1909-10	1,471 49	42,625 96	.....	4,709,014 42
1910-11	1,378 19	11,336 06	.....	5,093,140 45
1911-12	1,066 05	32,824 65	971,339 00	6,714,734 47
1912-13	1,241 25	22,873 55	3,549,242 00	9,081,423 54
1913-14	966 50	27,884 47	2,644,593 00	7,392,957 36
1914-15	969 85	11,738 10	588,124 00	4,800,443 88
1915-16	908 15	28,002 62	19,389 00	5,961,346 75
1916-17	796 85	15,618 26	140,487 00	9,706,644 75
1917-18	562 25	9,074 15	336,757 00	10,365,372 83
	10,712 71	228,202 11	8,249,931 00	67,053,983 41
1918-19	789 22	12,381 71	.....	10,100,135 29
1919-20	430 78	22,837 87	.....	9,827,466 22
1920-21	448 31	811,970 45	.....	10,161,994 22
1921-22	524 64	20,128 63	.....	5,658,619 79
1922-23	454 00	20,060 18	.....	4,253,841 78
1923-24	603 30	28,317 00	.....	4,228,326 14
1924-25	334 12	20,079 55	.....	4,300,583 25
1925-26	920 12	12,294 75	.....	5,271,132 53
1926-27	453 19	42,139 86	.....	5,374,892 28
1927-28	350 79	14,378 32	.....	6,194,476 26
	5,308 47	1,004,588 32	.....	65,371,737 76
Decreases	5,404 24	.....	8,249,931 00	1,682,245 65
Increase	.....	776,386 21	.....	

Appended hereto are individual reports of the Commissioner of Dominion Lands; the Director of the Forest Service; the Commissioner of National Parks of Canada; the Director of Water Power and Reclamation; the Director of the North West Territories and Yukon Branch; and the Director General of Surveys. The Geodetic Survey, the Topographical Survey, the Water Power and Reclamation Service, the Forest Service, and the National Parks of Canada Branch publish separate annual reports which review the work of the year in greater detail.

Your obedient servant,

W. W. CORY,
Deputy Minister.

November 1, 1928.

I

DOMINION LANDS

REPORT OF THE COMMISSIONER, J. W. GREENWAY

Applications for Patent	1927–28
Number examined	7,983
New applications	3,821
Applications accepted and notifications issued	3,037
Certificates of recommendation sent out	48

Superintendent of Western Land Agencies

Report of Agencies

Agency	Homestead entries granted	Land Sales	Applications for patent received	Land entries cancelled	Permits issued	
		Ordinary and school lands			Timber	Hay
Manitoba—						
Dauphin	305	16	251	637	713	359
*The Pas						
Winnipeg	383	129	253	1,180		
Saskatchewan—						
Moose Jaw	949	94	570	1,075	58	928
Prince Albert	2,006	99	1,179	1,463	1,494	1,322
Alberta—						
Calgary	176	34	156	353	244	198
Edmonton	1,450	86	721	1,378	2,083	826
Grande Prairie	909	15	284	448	358	102
Lethbridge	125	26	60	560	1	55
Peace River	854	23	185	712	439	209
British Columbia—						
Kamloops	33	29	98	136	264	2
Revelstoke	26	6	52	70	248	
New Westminster	26	16	40	48	272	

Note.—Owing to the fact that adjustments are being made from day to day (including restoration of cancelled entries and sales in some cases, and in other cases disallowance of entries reported by the various agents), these figures can only be taken as indicating approximately the business transacted at each agency.

*The Pas office is that of a Mining Recorder, who is also Sub-Agent. The returns from this office for the fiscal year were as follows: Mining locations, 3,152; assessments, 15; rentals, 64.

HOMESTEAD INSPECTORS, PRINCIPAL WORK PERFORMED BY

Headquarters	Name	Land inspections made	Applications for patent	Miles travelled	
				Wagon	Rail
Manitoba—					
Dauphin	W. S. Gordon	80	.....	1,771	4,309
"	W. J. Mayberry	721	105	7,568	1,554
"	G. L. Speers	550	124	4,423	8,774
Winnipeg	F. J. Drew	702	59	6,890	10,420
"	*W. H. Gray	455	89	6,116½	4,918
"	Wm. Lagimodiere	510	78	4,438	5,634
"	J. H. Thompson	195	.....	6,807	4,954
"	W. H. Wardrop	278	.....	6,624	4,877
"	*F. L. Morton	113	12	1,114	2,690
"	*J. S. Mortimer	32	.....	462	676
"	E. A. Koons	422	.....	7,200	2,988
"	W. A. Willets	152	.....	1,462	4,233
"	W. L. Jerome	765	.....	4,059	8,526
"	Gust Mager	235	.....	3,456	3,732
Saskatchewan—					
Moose Jaw	C. E. Barr	1,049	34	10,494	992
"	F. J. Bigg	1,032	12	8,530	6,467
"	J. C. Balinhard	1,077	76	13,722	4,673
"	J. Furnis	859	15	7,617	1,583
"	G. H. Lydiard	1,305	38	13,964	1,676
"	T. A. Underwood	1,994	65	17,605	3,245
"	*F. R. Folkes	153	.....	979	398
"	*T. M. Morgan	653	5	10,101	2,335
"	*W. A. Brown	261	4	1,777	1,888
"	*L. G. Ingalls	59	.....	.....	75
"	*D. Carmichael	63	1	770	140
"	*Norman McLeod	.....	.....	520	.....
"	*W. A. Coppin	42	.....	469	274
"	*A. J. Colquhoun	30	.....	383	434
"	*H. Gleeson	167	5	529	1,127
"	*F. M. Lambert	201	3	1,308½	576
"	*E. L. J. Jaycock	99	.....	721	537
Prince Albert	Harry Browne	307	20	4,262	5,944
"	N. I. Edwards	291	19	6,125	2,081
"	A. E. Mosses	1,095	77	11,721	2,772
"	Fred McKenzie	645	56	5,661	5,004
"	A. Smyth	746	35	5,891	9,537
"	S. Taylor	456	41	10,011	1,751
"	E.H.E. Webb-Bowen	496	80	3,651	3,400
"	W. W. Whelan	787	34	10,297	2,437
Alberta—					
Calgary	R. A. Kembry	912	23	10,972	5,761
"	D. H. Minchin	241	7	3,348	6,019
"	J. Nurcombe	1,411	31	8,680	4,486
"	Wm. Tempany	1,314	22	14,040	576
"	*J. P. McArthur	413	4	1,543	1,360
"	*H. B. Stickney	162	10	1,052	1,725
Edmonton	T. J. Cunningham	715	11	8,752	2,319
"	I. S. Doze	566	52	4,336	3,144
"	J. P. Duggan	560	50	3,814	1,894
"	*D. A. McKay	211	2	3,876	2,825
"	J. E. McMullen	391	8	4,093	3,219
"	*A. McMillan	212	.....	5,272	4,620
"	*J. H. McLeod	311	.....	4,778½	6,691
"	F. W. Neilson	345	27	3,590	2,357
"	*A. Sullivan	459	65	4,529	4,567
"	R. S. Wyllie	374	35	3,469	8,475
"	*W. E. Bristow	133	.....	2,006	3,444
"	*H. Knapp	90	.....	2,825	2,090
Grande Prairie	T. M. Newton	381	105	7,518	.....
"	L. T. Smith	481	70	9,726	90
Lethbridge	H. S. McCowan	1,202	5	7,534	1,870
"	D. E. Wilcox	862	18	9,944	1,432
"	H. L. Bowyer	859	3	10,064	1,616
Peace River	S. Grimwood	599	52	7,075	2,487
"	S. Hayden	403	17	5,721	3,430
British Columbia—					
Kamloops	P. C. Campbell	424	.....	5,156	1,514
"	J. M. Benzie	420	58	5,357	2,399
Revelstoke	*H. Cook	218	40	1,966	4,047
"	*W. E. Smith	56	4	1,110	1,105

*Employed for portion of year only.

REVENUES COLLECTED AT DOMINION LANDS AGENCIES, CLASSIFIED UNDER THE VARIOUS HEADINGS

Agency	Agent	Land Patents Branch	Timber and Grazing Branch	Reclamation Branch
		$ cts.	$ cts.	$ cts.
Manitoba—				
Winnipeg	L. P. O. Noel	11,245 33	468 44	155 82
Dauphin	E. Widmeyer	4,311 35	18,337 26	.....
Saskatchewan—				
Moose Jaw	J. A. Reid	460,461 64	56,238 15	147 49
Prince Albert	L. C. Paterson	63,871 30	232,175 37	44 80
Alberta—				
Calgary	E. H. Crockett (Acting)	62,809 21	79,989 34	192 66
Edmonton	A. Norquay	27,396 14	256,856 52	530 34
Lethbridge	E. F. Layton (Acting)	54,919 47	33,963 39	210 00
Peace River	R. Cruickshank	13,067 23	.....	.....
Grande Prairie	H. W. Clarke (Acting)	12,957 04	5,472 70	.....
British Columbia—				
Kamloops	H. J. Parker	2,938 74	64,097 39	.....
Revelstoke	T. J. Wadman	1,746 27	32,148 81	.....
New Westminster	E. Walmsley	6,067 03	414,021 31	.....

REVENUES COLLECTED AT DOMINION LANDS AGENCIES—*Concluded*

Agency	Agent	Mining Lands Branch	School Lands Branch	Miscellaneous	Total
		$ cts.	$ cts.	$ cts.	$ cts.
Manitoba—					
Winnipeg	L. P. O. Noel	44,924 96	6,132 89	2,363 27	65,290 71
Dauphin	E. Widmeyer	1,472 65	3,389 47	118 16	27,628 89
Saskatchewan—					
Moose Jaw	J. A. Reid	19,289 39	84,679 61	138,534 89	759,351 17
Prince Albert	L. C. Paterson	9,514 92	30,975 74	14,983 28	351,565 41
Alberta—					
Calgary	E. H. Crockett (Acting)	186,449 83	59,246 16	15,043 49	403,730 69
Edmonton	A. Norquay	149,611 99	24,255 20	2,321 00	460,971 19
Lethbridge	E. F. Layton (Acting)	184,723 97	36,601 41	21,882 24	332,300 48
Peace River	R. Cruickshank	.....	.....	1,386 78	14,454 01
Grande Prairie	H. W. Clarke (Acting)	261 60	1,228 98	1,867 38	21,787 70
British Columbia—					
Kamloops	H. J. Parker	5,525 45	.....	.....	72,561 58
Revelstoke	T. J. Wadman	99 80	.....	.....	33,994 88
New Westminster	E. Walmsley	2,655 99	.....	.....	422,744 33

REPORT OF THE CONTROLLER OF THE LAND PATENTS BRANCH AND REGISTRAR OF DOMINION LANDS PATENTS

With statements, A to K, in relation thereto

LETTERS PATENT

During the fiscal year ended March 31, 1928, there were 5,490 letters patent issued, covering a total area of 938,652 acres, divided according to provinces as follows:—

Province	Patents	Acres
Manitoba	495	66,507
Saskatchewan	2,534	382,644
Alberta	2,142	461,715
British Columbia	295	27,056
Yukon Territory	18	725
Northwest Territories	6	5
Totals	5,490	938,652

The various kinds of grants are summarized below and are later dealt with in detail in statements A to G, inclusive.

Grants	Patents	Acres
Homesteads	2,164	327,782
Sales	1,643	353,874
Pre-emptions	676	107,250
Purchased homesteads	77	10,923
Railways	102	12,580
Special grants	297	42,100
Military bounty grants	5	800
Northwest Halfbreed grants	28	4,487
Licence of Occupation	11	36
Soldier grants	468	70,666
Hudson's Bay Company grants	15	7,919
Commutation grants	1	23
Manitoba Act grants	1	52
Northwest Mounted Police grants	2	160
Totals	5,490	938,652

There was a decrease of 53 letters patent and an increase in the area patented of 137,446 acres, as compared with the previous year.

There are recorded in the Land Patents Branch 479,442 letters patent, aggregating 105,348,651 acres, which have been issued between May, 1873, and March 31, 1928.

LANDS DISPOSED OF

Seven thousand two hundred and thirty-three (7,233) homestead entries were granted, aggregating an approximate area of 1,157,280 acres, made up by provinces as follows: Manitoba, 688; Saskatchewan, 2,961; Alberta, 3,411; British Columbia, 173; total, 7,233.

There was an increase of 1,473 in the number of homestead entries granted, as compared with the previous year.

By land agencies the 7,233 homestead entries were made up as follows:—

Manitoba.—Dauphin, 305; Winnipeg, 383; total, 688.

Saskatchewan.—Moose Jaw, 950; Prince Albert, 2,011; total, 2,961.

Alberta.—Calgary, 176; Edmonton, 1,450; Grand Prairie, 845; Lethbridge, 125; Peace River, 815; total, 3,411.

British Columbia.—Grande Prairie, 64; Kamloops, 33; New Westminster, 11; Peace River, 39; Revelstoke, 26; total, 173.

The 7,233 homestead entries represented 16,489 persons as compiled from information obtained from each entrant. Of these entries, 2,268 were made by residents of the several provinces of the Dominion; 947 by persons who had previously obtained homestead entries, which had been cancelled by default or at the request of the entrant in order, in most cases, that he might enter for other lands; 734 were made by persons from the British Isles; 955 by persons from the United States; 403 by Austrians; 163 by Hungarians; 282 by Russians; 25 by Finlanders; 289 by Norwegians; 159 by Swedes; 188 by Germans; 50 by Frenchmen 27 by Belgians and the remaining 743 were made up of citizens of various other countries.

There were 504 soldier grant entries made during the year, aggregating approximately 80,640 acres made up as follows:—

	Number of entries	Acres
Manitoba	35	5,600
Saskatchewan	226	36,160
Alberta	216	34,560
British Columbia (Railway Belt and Peace River Block)	27	4,320
Totals	504	80,640

By land agencies the soldier grants were as follows:—

Manitoba—Dauphin, 9; Winnipeg, 26; total, 35.

Saskatchewan—Moose Jaw, 75; Prince Albert, 151; total, 226.

Alberta—Calgary, 27; Edmonton, 90; Grande Prairie, 37; Lethbridge, 14; Peace River, 48; total, 216.

British Columbia—(Railway Belt and Peace River Block) Grande Prairie, 11; Kamloops, 5; New Westminster, 6; Peace River, 3; Prince Albert, 2; total, 27.

CANCELLED ENTRIES

There were cancelled 7,315 entries as follows:—

—	Manitoba	Saskatchewan	Alberta	British Columbia
Homesteads	1,034	1,522	2,203	262
Soldier grant entries	212	201	383	23
Pre-emptions	.....	740	546	.....
Purchased homesteads	.....	49	27	.....
Sales	27	20	20	46
Totals	1,273	2,532	3,179	331

SALES

Three hundred and ten (310) sales were made during the fiscal year 1927-28 for 27,800 acres, with an average for each sale of about 89⅔ acres.

The increase in the average area as compared with an average area of 41⅔ acres last year is due to the fact that one sale to the Department of Indian Affairs comprised 14,951.51 acres.

REVENUE

The sum of $701,382.27 including $328,759.36 interest on deferred payments, was received on account of purchased homesteads, pre-emptions and ordinary sales, showing an increase of $174,003.46, as compared with the payments received during the previous year.

The sum of $131,031.30 has also been received for entry fees, improvements, and sundries, making a total revenue for the fiscal year of $832,413.57.

REFUNDS

There were 583 refunds, amounting to $27,207.20, as follows:—

455 refunds—Value of improvements collected on cancelled homesteads	$ 22,867 73
128 refunds—Overpayments on sales; and on moneys on account of purchased homesteads and pre-emption sales, entries for which had been cancelled	4,339 47
Total	$ 27,207 20

NEWLY SURVEYED LANDS THROWN OPEN TO HOMESTEAD ENTRY

Newly surveyed lands comprised in fifteen townships were made available for homestead entry as follows:—

Manitoba—Dauphin in 4 townships.

Saskatchewan—Prince Albert in 3 townships.

Alberta—Calgary in 2 townships; Peace River in 1 township; total, 3 townships.

British Columbia—Kamloops in 1 township; Revelstoke in 4 townships; total, 5 townships.

STATEMENT A—Letters patent issued covering Dominion Lands in Manitoba, Saskatchewan, Alberta, Northwest Territories, British Columbia and the Yukon Territory

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	British Columbia homesteads	132	13,602	92	10,186
2	British Columbia sales	24	825	14	716
3	Coal surface sales	2	71	.....	.....
4	Commutation grants	1	23	.....	.....
5	Drainage sales	10	814	11	1,142
6	Forestry sales	1	19	.....	.....
7	Homesteads	1,990	307,582	1,720	266,758
8	Homesteads, Peace River Block	40	6,360	37	5,918
9	Hudson's Bay Co.	15	7,919	870	142,313
10	Licences of occupation	11	36	7	28
11	Manitoba Act grants	1	52	1	70
12	Military bounty grants	5	800	2	320
13	Mining lands sales	2	97	1	52
14	Mineral Rights, sales (342 acres)	2	.....	3	.....
15	Northwest half-breed grants	28	4,487	6	774
16	Northwest Mounted Police grants	2	160	.....	.....
17	Parish sales	1	157	.....	.....
18	Pre-emption sales	676	107,250	551	86,924
19	Purchased homesteads	77	10,923	56	7,830
20	Quit claim, drainage sales	1	34	7	.....
21	Quit claim, sales	2	2	22	.....
22	Quit claim, special grants	1	67	8	.....
	Railways:—				
23	Alberta and Great Waterways Railway Co.	1	2	2	3
24	Alberta Railway and Irrigation Co.	5	5,880	.....	.....
25	Calgary and Edmonton Railway Co.	.....	.....	1	1,827
26	Calgary and Edmonton Railway Co. (minerals only, 161 acres)	1	.....	.....	.....
27	Canadian National Railway Co.	19	153	23	115
28	Canadian Northern Railway Co.	2	182	26	238
29	Canadian Northern Western Ry. Co.	2	5	.....	.....
30	Canadian Pacific Railway grants	48	5,765	51	10,558
31	Canadian Pacific Railway road-bed and station grounds	.....	.....	2	54
32	Edmonton, Dunvegan and British Columbia Railway Co.	4	77	.....	.....
33	Grand Trunk Pacific Railway Co.	1	6	5	50
34	Grand Trunk Pacific Railway Townsite sale	1	212	.....	.....
35	Lacombe and North Western Railway	15	213	.....	.....
36	Lacombe and North Western Railway Townsite grants	1	11	1	12
37	Manitoba and North-Western Railway Co. of Canada	.....	.....	6	45
38	Manitoba and South Eastern Railway grants	2	74	.....	.....
39	Manitoba South-Western Colonization Railway Co.	.....	.....	1	320
40	Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.	.....	.....	5	801
41	Sales	729	232,461	194	6,205
42	Sales, Peace River Block	2	48	1	1
43	School lands sales	851	118,859	679	91,992
44	Soldier grants	454	68,424	365	54,515
45	Soldier grants, Peace River Block	14	2,242	16	2,563
46	Special grants	285	40,905	732	107,569
47	Special grants (minerals only, 80 acres)	1	.....	.....	.....
48	Special grants (timber only, 280 acres)	3	.....	8	.....
49	Special grants, Peace River Block	7	1,128	7	1,125
50	Yukon Territory homesteads	2	238	1	160
51	Yukon Mining lands sales	8	413	.....	.....
52	Yukon Territory sales	8	74	9	22
	Totals	5,490	938,652	5,543	801,206

STATEMENT B—Letters patent issued covering Dominion Lands in Manitoba

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	Commutation grants	1	23	.....	.....
2	Drainage sales	.....	.....	1	120
3	Homesteads	304	45,549	202	30,336
4	Hudson's Bay Co.	7	3,525	19	1,458
5	Manitoba Act grants	1	52	1	70
6	Mining lands sales	2	97	1	52
7	Northwest half-breed grants	2	183	1	18
8	Parish sales	1	157	.....	.....
9	Pre-emption sales	2	320	.....	.....
10	Quit claim, sales	.....	.....	3	.....
11	Quit claim, special grants	.....	.....	1	.....
	Railways:—				
12	Canadian National Railway Co.	7	85	.....	.....
13	Canadian Northern Railway Co.	.....	.....	8	66
14	Canadian Pacific Railway grants	2	.....	.....	.....
15	Sales	47	1,075	28	356
16	School lands sales	37	3,704	43	5,266
17	Soldier grants	61	9,516	50	7,655
18	Special grants	20	2,221	85	12,568
19	Special grants (minerals only, 80 acres)	1	.....	.....	.....
	Totals	495	66,507	443	57,965

STATEMENT C—Letters patent issued covering Dominion Lands in Saskatchewan

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	Drainage sales	.....	.....	5	409
2	Forestry sales	1	19	.....	.....
3	Homesteads	911	141,145	759	118,039
4	Hudson's Bay Co.	5	2,307	195	28,421
5	Licences of occupation	3	20	5	17
6	Military bounty grants	5	800	.....	.....
7	Northwest half-breed grants	23	3,503	.....	.....
8	Northwest Mounted Police grants	2	160	.....	.....
9	Pre-emption sales	571	90,610	477	75,368
10	Purchased homesteads	55	8,687	41	6,450
11	Quit claim, drainage sales	.....	.....	1	.....
12	Quit claim, sales	2	2	15	.....
13	Quit claim, special grants	1	67	.....	.....
	Railways:—				
14	Alberta Railway and Irrigation Co.	5	5,880	.....	.....
15	Calgary and Edmonton Railway Co.	.....	.....	1	1,827
16	Canadian National Railway Co.	10	55	9	61
17	Canadian Northern Railway Co.	2	182	18	172
18	Canadian Pacific Railway grants	9	4,862	35	9,776
19	Grand Trunk Pacific Railway Co.	1	6	5	50
20	Manitoba and North-Western Railway Co. of Canada	.....	.....	6	45
21	Manitoba and South Eastern Railway grants	2	74	.....	.....
22	Manitoba South-Western Colonization Railway Co.	.....	.....	1	320
23	Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.	.....	.....	5	801
24	Sales	98	4,033	82	3,224
25	School lands sales	566	80,702	398	55,410
26	Soldier grants	207	32,438	182	28,189
27	Special grants	55	7,092	239	35,023
	Totals	2,534	382,644	2,479	363,602

STATEMENT D—Letters patent issued covering Dominion Lands in Alberta

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	Coal surface sales	2	71	.....	.....
2	Drainage sales	10	814	5	613
3	Homesteads	775	120,888	759	118,383
4	Hudson's Bay Co.	3	2,087	656	112,434
5	Licences of occupation	8	16	2	11
6	Military bounty grants	.....	.....	2	320
7	Mineral rights, sales (342 acres)	2	.....	3	.....
8	Northwest half-breed grants	3	801	5	756
9	Pre-emption sales	103	16,320	74	11,556
10	Purchased homesteads	13	2,075	8	1,257
11	Quit claim, drainage sales	1	34	6	.....
12	Quit claim, sales	.....	.....	4	.....
13	Quit claim, special grants	.....	.....	7	.....
	Railways:—				
14	Alberta and Great Waterways Railway Co.	1	2	2	3
15	Calgary and Edmonton Railway Co. (minerals only, 161 acres)	1	.....	.....	.....
16	Canadian National Railway Co.	2	13	13	54
17	Canadian Northern Western Railway Co.	2	5	.....	.....
18	Canadian Pacific Railway grants	.....	.....	8	512
19	Canadian Pacific Railway road-bed and station grounds	.....	.....	1	25
20	Edmonton, Dunvegan and British Columbia Railway Co.	4	77	.....	.....
21	Grand Trunk Pacific Railway Townsite sale	1	212	.....	.....
22	Lacombe and North Western Railway Co.	15	213	.....	.....
23	Lacombe and North Western Railway Townsite grant	1	11	1	12
24	Sales	578	227,348	72	2,577
25	School land sales	248	34,453	238	31,316
26	Soldier grants	164	25,126	116	18,256
27	Special grants	205	31,149	395	58,320
	Totals	2,142	461,715	2,377	356,405

STATEMENT E—Letters patent issued covering Dominion Lands in British Columbia

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	British Columbia homesteads	132	13,602	92	10,186
2	British Columbia sales	24	825	15	716
3	Homesteads, Peace River Block	40	6,360	37	5,918
4	Purchased homesteads	9	161	7	123
	Railways—				
5	Canadian Pacific Railway grants	37	903	8	270
6	Canadian Pacific Railway road-bed and station grounds	.....	.....	1	29
7	Sales, Peace River Block	2	48	1	1
8	Soldier grants	22	1,344	17	415
9	Soldier grants, Peace River Block	14	2,242	16	2,563
10	Special grants	5	443	13	1,658
11	Special grants (timber only, 280 acres)	3	.....	8	.....
12	Special grants, Peace River Block	7	1,128	7	1,125
	Totals	295	27,056	222	23,004

STATEMENTS F and G—Letters patent issued covering Dominion Lands

F—In Yukon Territory

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	Yukon Territory homesteads	2	238	1	160
2	Yukon Mining lands sales	8	413	.....	.....
3	Yukon Territory sales	8	74	9	22
	Totals	18	725	10	182

G—In the Northwest Territories

No.	Nature of Grant	From April 1, 1927 to March 31, 1928		From April 1, 1926 to March 31, 1927	
		Patents	Acres	Patents	Acres
1	Sales	6	5	12	48

STATEMENT H—Number of Homestead Entries made during the fiscal year, 1927-28, the Nationality of the Homesteaders and the Provinces in which the entries were made

Country of Origin	Provinces				Total
	Manitoba	Saskatchewan	Alberta	British Columbia	
Canada—					
Ontario	28	275	234	13	550
Quebec	16	174	258	5	453
Nova Scotia	2	22	37	2	63
New Brunswick	3	11	14	1	29
Prince Edward Island	16	10	11	.....	37
Manitoba	156	166	83	2	407
Saskatchewan	8	312	59	3	382
Alberta	1	23	272	9	305
British Columbia	.....	4	28	10	42
Persons who had previous entry	97	359	448	43	947
Newfoundland	1	.....	2	.....	3
United States	25	445	463	22	955
England	38	192	250	14	494
Scotland	11	61	96	11	179
Ireland	2	25	31	3	61
France	6	23	21	.....	50
Belgium	.....	10	16	1	27
Switzerland	4	14	14	.....	32
Italy	2	.....	7	.....	9
Roumania	7	32	25	1	65
Syria	1	1	2	.....	4
Germany	5	58	123	2	188
Austria	125	109	166	3	403
Holland	1	15	29	.....	45
Carried forward	555	2,341	2,689	145	5,730

Country of Origin	Provinces				Total
	Manitoba	Saskatchewan	Alberta	British Columbia	
Brought forward	555	2,341	2,689	145	5,730
Denmark (other than Iceland)	7	35	40	2	84
Iceland	2	6	6	.....	14
Sweden	9	62	81	7	159
Norway	15	90	181	3	289
Russia	11	156	112	3	282
The Ukraine	2	8	11	1	22
The West Indies	.....	.....	1	.....	1
Bulgaria	.....	.....	1	.....	1
Mexico	.....	.....	2	.....	2
Japan	.....	.....	1	.....	1
S. Africa (whites)	.....	2	3	.....	5
Australia	.....	.....	2	.....	2
New Zealand	.....	.....	1	.....	1
S. America	.....	.....	1	.....	1
Greece	.....	.....	1	.....	1
Poland	32	130	189	2	353
Finland	1	4	16	4	25
Hungary	46	87	30	.....	163
Czechoslovakia	6	24	30	.....	60
Luxemberg	.....	2	2	.....	4
British India	.....	8	6	.....	14
Yugo-Slavia	2	6	5	5	18
Africa (negro)	.....	.....	.....	1	1
Totals	688	2,961	3,441	173	7,233

Number of souls represented by above entries, 16,489.

STATEMENT I—Number of Homestead Entries made in the Western Provinces during the fiscal year by persons from the United States

State	Provinces				Total	State	Provinces				Total
	Manitoba	Saskatchewan	Alberta	British Columbia			Manitoba	Saskatchewan	Alberta	British Columbia	
Alabama			2		2	Brought forward	21	346	309	13	689
Arkansas		3	1		4	Missouri		11	8		19
California			2		2	Montana	1	12	10	1	24
Carolina, North		1	1		2	Nebraska		16	21		37
Carolina, South			1		1	New Hampshire		2	2		4
Colorado		1	2		3	New Jersey		1			1
Connecticut		3	6		9	New York	1	10	10		21
Dakota, North	8	126	81	5	220	Ohio		2	5	1	8
Dakota, South	4	38	26	2	70	Oklahoma		5	15		20
Idaho		2	9		11	Oregon			5	1	6
Illinois	1	9	17		27	Pennsylvania		8	7		15
Indiana		5	10		15	Rhode Island	1		2		3
Iowa		25	28		53	Tennessee			4		4
Kansas		14	10		24	Texas		1	5		6
Kentucky	1		8		9	Vermont	1	1	1		3
Maine	1	5	4		10	Virginia		3	2	1	6
Maryland			1		1	Virginia, West		3	1		4
Massachusetts		4	11		15	Washington		1	24	2	27
Michigan		18	21	2	41	Wisconsin		23	27	3	53
Minnesota	4	90	66	4	164	Wyoming			5		5
Mississippi	2	2	2		6						
Carried forward	21	346	309	13	689	Totals	25	445	463	22	955

STATEMENT J—Number of Homestead Entries made during the fiscal year, as compared with the previous fiscal year

Agency	Manitoba		Saskatchewan		Alberta		British Columbia		Total
	1927-28	1926-27	1927-28	1926-27	1927-28	1926-27	1927-28	1926-27	
Calgary					176	165			
Dauphin	305	506							
Edmonton					1,450	1,462			
Grande Prairie					845	193	64	23	
Kamloops							33	19	
Lethbridge					125	74			
Moose Jaw			950	970					
New Westminster							11	33	
Peace River					815	251	39	7	
Prince Albert			2,011	1,732					
Revelstoke							26	34	
Winnipeg	383	291							
Fiscal year 1928-27									7,233
Fiscal year 1927-26									5,760
Net increase									1,473
Totals	688	797	2,961	2,702	3,411	2,145	173	116	

STATEMENT K—Number of Soldier Grant Entries made during the fiscal year as compared with the previous fiscal year

Agency	Manitoba		Saskatchewan		Alberta		British Columbia		Total
	1928-27	1927-26	1928-27	1927-26	1928-27	1927-26	1928-27	1927-26	
Calgary					27	27			
Dauphin	9	25							
Edmonton					90	92			
Grand Prairie					37	23	11	2	
Kamloops							5	7	
Lethbridge					14	11			
Moose Jaw			75	105					
New Westminster							6	6	
Peace River					48	31	3	4	
Prince Albert			151	112					
Revelstoke							2	2	
Winnipeg	26	21							
Fiscal year 1928-27									504
Fiscal year 1927-26									468
Net increase									36
Totals	35	46	226	217	216	184	27	21	

REPORT OF THE CONTROLLER OF SCHOOL LANDS

During the fiscal year ended March 31, 1928, school lands were disposed of by public auction and private sales in the provinces of Manitoba, Saskatchewan, and Alberta as follow:—

How disposed of	Area in acres	Value $ cts.	Average per acre $ cts.
MANITOBA			
School sites	3·00	30 00	10 00
Railway companies	24·02	168 14	7 00
Drainage ditch	6·00	42 00	7 00
Roadways	8·00	56 00	7 00
Totals	41·02	296 14	7 22
SASKATCHEWAN			
Church and cemetery sites	12·00	266 00	22 16
School sites	13·00	160 00	12 31
Railway companies	183·83	2,711 51	14 75
Municipalities (roads)	2·37	16 59	7 00
Drainage ditch and reservoirs	0·73	2 65	3 63
Public auction	276,588·21	5,443,473 48	30 83
Totals	276,800·14	5,446,630 23	30 81
ALBERTA			
Church and cemetery sites	10·06	102 42	10 18
School sites	28·99	313 98	10 83
Railway companies	50·37	731 25	14 52
Drainage ditch	3·58	35 80	10 00
Special (coal)	39·90	598 50	15 00
Public auction	210,799·80	3,554,381 60	16 86
Totals	210,932·70	3,556,163 55	16 85

After making the necessary deductions for cancelled sales and adjustments in regard to alterations in areas, the approximate net areas and values of school lands and town lots disposed of to March 31, 1928, are as follow:—

Province	Area in acres	Value	Average per acre	Value of town lots
		$ cts.	$ cts.	$ cts.
Manitoba	637,585 67	6,118,687 26	9 60	5,240 00
Saskatchewan	1,441,203 49	24,145,618 59	16 75	13,701 00
Alberta	949,225 57	13,663,537 24	14 39	39,380 00

The number of permits and leases issued, the number of leases in good standing, and the combined revenue derived therefrom for the provinces of Manitoba, Saskatchewan, and Alberta for the fiscal year were as follow:—

—	Permits issued	Leases issued	Leases in good standing	Revenue derived
				$ cts.
Grazing	6,941	.....	.....	71,252 20
Cultivation	873	.....	.....	48,353 22
Hay	1,875	.....	6	4,999 96
Timber	565	.....	.....	26,420 50
Coal	.....	5	69	16,233 90
Petroleum and natural gas	.....	150	1,089	16,558 90
Special	.....	4	44	1,136 21

Registration Fees.—During the fiscal year 485 assignments of sales and leases were registered, comprising lands in the provinces of Manitoba, Saskatchewan and Alberta. The fees amounted to $1,700.84.

REVENUE AND EXPENDITURE STATEMENTS

The total net revenue collected for the fiscal year was as follows:—

Manitoba	$ 58,575 96
Saskatchewan	1,170,889 31
Alberta	838,693 83
	$2,068,159 10

The revenues collected for the fiscal year (less principal moneys and less expenditure) and paid to the provinces of Manitoba, Saskatchewan and Alberta, were as follow:—

Province	Revenue other than principal moneys	Expenditure	Amount paid to province
	$ cts.	$ cts.	$ cts.
Manitoba	38,776 13	13,289 27	25,486 86
Saskatchewan	336,819 40	56,930 37	279,889 03
Alberta	337,617 56	38,563 64	299,053 92

The balance standing to the credit of the School Lands Fund for each province as on March 31, 1928, and the interest paid on the investment for the fiscal year 1927-1928 were as follow:—

Province	Total amount at credit of fund	Amount invested in debenture stock	Interest paid on investments
	$ cts.	$ cts.	$ cts.
Manitoba	5,864,858 95	5,864,000 00	292,350 00
Saskatchewan	15,679,674 47	15,679,000 00	752,700 00
Alberta	8,278,645 61	8,278,000 00	390,125 00

Statements herewith lettered A, B, and C respectively show the revenue collected in respect of each of the provinces of Manitoba, Saskatchewan, and Alberta for the fiscal year, duly classified.

Statements herewith lettered D, E, and F respectively show the balance standing to the credit of the School Lands Fund for each province as on March 31, 1928, after deducting amounts invested in debenture stock as provided for by Order in Council.

STATEMENT A—Manitoba School Lands—Revenue collected for fiscal year

Source	Gross totals		Refunds	Net totals
	$ cts.	$ cts.	$ cts.	$ cts.
Sales—Principal	20,977 65			
Less adjustments	478 22	20,499 43	11 37	20,488 06
Interest	21,653 96			
Add adjustments	494 54	22,148 50	2 08	22,146 42
Cultivation	3,329 24			
Less: Office fees transferred to Dominion Lands	77 00	3,252 42	2 00	3,250 24
Grazing	2,978 36			
Less: Office fees transferred to Dominion Lands	335 00	2,643 36	65 67	2,577 69
Timber	8,564 47			
Less: Office fees transferred to Dominion Lands	241 00	8,323 47	307 28	8,016 19
Hay	2,250 35			
Less: Office fees transferred to Dominion Lands	547 00	1,703 35	107 50	1,595 85
Petroleum and natural gas	.....	570 00	245 00	325 00
Registration fees	.....	64 50	.....	64 50
Miscellaneous	.....	112 01	.....	112 01
Totals	.....	59,316 86	740 90	58,575 96

STATEMENT B—Saskatchewan School Lands—Revenue collected for fiscal year

Source	Gross totals		Refunds	Net totals
	$ cts.	$ cts.	$ cts.	$ cts.
Sales—Principal	851,474 97			
Less adjustments	4,188 13	847,286 84	1,061 91	846,224 93
Interest	246,123 25			
Add adjustments	4,171 81	250,295 06	120 89	250,174 17
Cultivation	27,746 45			
Less: Office fees transferred to Dominion lands	466 00			
Add adjustments	55 76	27,336 21	2,856 42	24,479 79
Grazing	47,674 69			
Less: Office fees transferred to Dominion Lands	4,117 00			
Less adjustments	53 76	43,503 93	4,067 06	39,436 87
Timber	3,651 58			
Less: Office fees transferred to Dominion Lands	209 00	3,442 58	103 32	3,339 26
Hay	3,761 20			
Less: Office fees transferred to Dominion Lands	985 00	2,776 20	172 90	2,603 30
Coal	.....	841 31	.....	841 31
Petroleum and natural gas	.....	2,369 78	85 00	2,284 78
Registration fees	.....	661 65	73 76	587 89
Miscellaneous	1,102 69			
Less adjustment	2 00	1,100 69	183 68	917 01
Totals	.....	1,179,614 25	8,724 94	1,170,889 31

STATEMENT C—Alberta School Lands—Revenue collected for fiscal year

Source	Gross totals		Refunds	Net totals
	$ cts.	$ cts.	$ cts.	$ cts.
Sales—Principal	517,986 80			
Less: Adjustments	2,065 34	515,921 46	4,114 00	511,807 46
Interest	210,773 35			
Add: Adjustments	2,065 34	212,838 69	21 65	212,817 04
Cultivation	21,199 44			
Less: Office fees transferred to Dominion Lands	330 00	20,869 44	246 25	20,623 19
Grazing	33,668 43			
Less: Office fees transferred to Dominion Lands	2,489 00	31,179 43	1,941 79	29,237 64
Timber	15,414 61			
Less: Office fees transferred to Dominion Lands	114 00	15,300 61	235 56	15,065 05
Hay	1,177 81			
Less: Office fees transferred to Dominion Lands	343 00	834 81	34 00	800 81
Coal		15,392 59		15,392 59
Petroleum and natural gas		31,221 95	211 06	31,010 89
Registration fees		1,139 45	91 00	1,048 45
Miscellaneous		1,671 22	780 51	890 71
Totals		846,369 65	7,675 82	838,693 83

STATEMENT D—Revenue and Expenditure—Manitoba School Lands, 1927-28

Particulars	Dr.	Cr.
	$ cts.	$ cts.
By balance on April 1, 1927		370 89
" sales		42,634 48
" cultivation permits		3,250 24
" grazing rent, timber dues, hay dues, petroleum and miscellaneous		12,626 74
" registration fees		64 50
" interest on fund		688 23
To cost of management at Ottawa	12,089 30	
" cost of outside salaries, printing and stationery, advertising and general expenses	1,199 97	
" revenue and interest paid to Manitoba Government	25,486 86	
" investments in debenture stock	20,000 00	
" balance, March 31, 1928	858 95	
Totals	59,635 08	59,635 08

STATEMENT E—Revenue and Expenditure—Saskatchewan School Lands, 1927-28

Particulars	Dr.	Cr.
	$ cts.	$ cts
By balance on April 1, 1927		449 54
" sales		1,096,399 10
" cultivation permits		24,479 79
" timber dues, hay dues, grazing rent, coal, petroleum and miscellaneous		49,422 53
" registration fees		587 89
" interest on fund		12,155 02
To cost of management at Ottawa	36,297 84	
" cost of outside salaries, printing and stationery, and general expenses	20,632 53	
" revenue and interest paid to Saskatchewan Government	279,889 03	
" investments in debenture stock	846,000 00	
" balance, March 31, 1928	674 47	
Totals	1,183,493 87	1,183,493 87

STATEMENT F—Revenue and Expenditures—Alberta School Lands, 1927-28

Particulars	Dr.	Cr.
	$ cts.	$ cts.
By balance on April 1, 1927	.....	838 15
" sales	.....	724,624 50
" cultivation permits	.....	20,623 19
" timber dues, hay dues, grazing rent, coal, petroleum and miscellaneous	.....	92,397 69
" registration fees	.....	1,048 45
" interest on fund	.....	10,731 19
To cost of management at Ottawa	24,198 53	.....
" cost of outside salaries, advertising, printing and stationery, and general expenses	14,365 11	.....
" revenue and interest paid to Alberta Government	299,053 92	.....
" investments in debenture stock	512,000 00	.....
" balance, March 31, 1928	645 61	.....
Totals	850,263 17	850,263 17

REPORT OF THE SUPERINTENDENT, MINING LANDS BRANCH

The administration of those regulations which govern the disposal of mining rights on Dominion lands, that is, the mineral rights the property of the Crown in the provinces of Manitoba, Saskatchewan, Alberta, and in the Northwest and Yukon Territories, is the duty of the Mining Lands Branch. The principal metallic minerals produced in these areas are gold, silver, copper and lead. The non-metallic minerals are coal, petroleum, natural gas, clay, building material, and deposits or natural accumulations of soluble mineral salts and associated marls.

The most important mines on areas controlled by this department are the coal mines of the provinces of Alberta and Saskatchewan. These give employment to a large number of persons and the output for the last calendar year was 7,399,274 tons of coal, an increase of nearly 6 per cent over 1926-27.

The production of natural gas from Dominion lands in Alberta during the year was 12,933,801 M. cubic feet, and the production of petroleum, including naphtha, was approximately 321,154 barrels.

In central Manitoba there is now one mill operated by hydro-electric power for the purpose of treating the gold ores from the mines of the Central Manitoba Mines Limited.

In the vicinity of the Flinflon lake, Herb lake and Cold lake numerous mining companies are actively engaged in prospecting their properties. The Flin Flon Mines Limited have completed their investigations and exercised their options on certain properties and are preparing plans for the building of a large smelter and concentration works, the erection of which will be commenced as soon as the branch line of railway now being constructed reaches their properties.

The Yukon Territory during the year produced for export 37,478·68 ounces of fine gold, 1,645,825 ounces of silver, and 4,157,713 pounds of lead. The total value of these mineral exports exceeded $1,937,300. The concentration mill installed at Wernecke in the Mayo district, was in continuous operation during the year. The concentrates produced by this mill, together with the high-grade ore, are shipped for final treatment outside the territory.

All mineral rights are disposed of by lease, licence or permit for limited periods of time, and not by sale. The sources of revenue are confined to fees, rentals and royalties, and from these several sources there was collected during the last fiscal year the sum of $885,941.37.

Expenditures incurred in the actual development of petroleum and natural gas rights acquired under lease may, under the regulations, be accepted in satisfaction of rentals which should otherwise be paid in cash, and under this provision, rentals due the Crown, amounting to $324,903.84 were satisfied by such expenditures, and so reduced the revenue of the branch to that extent. The total revenue in cash, together with expenditures accepted in lieu of rental, amounted, therefore, to $1,210,845.21 during the year.

Statements lettered A and B showing in different forms how the mining revenue is made up, are attached. The statement lettered A shows the total revenue and the statement lettered B shows the revenue collected at each departmental agency in the western provinces and territories. That portion of the revenue of the Yukon Territory derived from mining rights only, including the export tax on gold shipped from the territory, amounted to $48,219.65.

Petroleum and Natural Gas.—There are now in force 6,908 petroleum and natural gas leases affecting Dominion lands, and embracing a total area of 725,635.33 acres, distributed as follows: In Manitoba, 128 leases, comprising 28,147 acres; in Saskatchewan, 305 leases, comprising 71,296 acres; in Alberta, 6,139 leases, comprising 584,822 acres; in British Columbia, 331 leases, comprising 37,317 acres; and in the Northwest Territories, five leases, comprising 4,053.33 acres.

Of the above number, 1,603 petroleum leases were issued during the year, comprising an area of 318,605 acres, and the total revenue derived from this source during the year amounted to $298,402.99.

The total number of petroleum and natural gas leases which have been issued on Dominion lands under the regulations is 38,932, and the total revenue which has been derived from this source since the beginning amounts to $5,601,-873.34, the total expenditures accepted in lieu of rental during the same period being $3,027,271.46.

On lands leased from the Crown about 400 wells have been drilled to depth for the discovery of oil and gas. Of these wells 141 produced gas in volume, and from 88 of the wells drilled, a considerable production of oil has been obtained.

From lands in the province of Alberta where the mineral rights are not the property of the Crown, there have been produced during the year approximately 321,154 barrels of crude naphtha.

In the Wainwright district, located southeast of Edmonton, about 30 wells have been drilled, six of which are capable of producing gas in quantity, and in eight of these wells oil has been obtained.

Natural gas has been piped from several of the fields of southern Alberta, and is being utilized for domestic and industrial purposes in Edmonton, Tofield, Viking, Calgary, Macleod, Lethbridge, Medicine Hat, Okotoks, Claresholm, and in a number of other centres of population. This gas is disposed of at from twenty-five to forty-seven and one-half cents per thousand cubic feet, and its efficiency is greater than that of manufactured gas.

Coal.—Prior to the year 1906 coal mining rights were disposed of by sale, at a price varying from seven to ten dollars an acre, and subject to the payment of a royalty of ten cents per ton on the quantity of coal mined, which royalty, however, has since been reduced to seven cents per ton. Such rights have since been disposed of by terminable lease, at a rental of one dollar an acre per annum and a royalty at the rate of five cents per ton. The area of coal mining rights disposed of by sale was approximately 245,000 acres, and the total revenue which was collected from the sale of such rights was $1,565,833.88. The total number of coal mining leases in force at the close of the fiscal year

was 596, comprising a total area of 214,577 acres, distributed as follows. In Alberta, 517 leases, comprising 205,090 acres; in Saskatchewan, 72 leases, comprising 3,257 acres; in British Columbia, five leases, comprising 6,090 acres; in the Yukon Territory, one lease, comprising 40 acres; and in the Northwest Territories, one lease, comprising 100 acres.

The total number of coal mining leases issued during the year was 73, comprising 26,788 acres, and the total revenue collected during the year for rental of such rights was $172,949.95.

The following statement shows the amounts which have been collected on account of royalty on coal mined from lands in the western provinces, the Northwest Territories and the Yukon Territory, respectively, during each of the past twenty years:—

Year	Alberta	Saskatchewan	British Columbia	Yukon	Northwest Territories
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1907–08	7,621 67	4 30	Nil	1,543 38	Nil
1908–09	5,322 39	358 11	"	371 73	"
1909–10	153,559 98	1,672 50	3 00	136 38	"
1910–11	218,932 88	2,184 74	3 50	125 00	"
1911–12	104,894 55	2,034 74	2 78	390 00	"
1912–13	142,997 79	3,145 72	6 95	1,069 11	"
1913–14	147,198 75	2,123 43	19 35	Nil	"
1914–15	104,489 77	1,880 06	4 90	"	"
1915–16	67,190 17	2,601 52	3 50	"	5 10
1916–17	149,447 82	2,228 08	8 92	"	Nil
1917–18	144,634 75	4,046 55	Nil	"	6 00
1918–19	175,687 66	3,193 05	"	"	Nil
1919–20	181,641 80	2,573 32	"	"	"
1920–21	190,545 80	2,703 41	"	"	"
1921–22	185,436 88	3,309 86	"	"	"
1922–23	171,723 83	3,035 18	"	"	"
1923–24	210,389 53	1,689 45	"	"	"
1924–25	148,979 10	2,421 11	7 50	"	1 50
1925–26	188,277 94	3,024 94	Nil	"	2 00
1926–27	218,150 10	4,726 93	"	"	3 50
1927–28	231,757 96	7,589 18	"	"	2 20

The total revenue derived from fees, rentals and royalties collected in connection with coal mining rights during the year amounted to $414,589.29.

Quartz and Placer Mining.—Placer mining claims are held under yearly lease, subject to an annual expenditure in development work. Quartz mining claims are similarly held until development has sufficiently progressed and the claim has been surveyed under proper instructions. A lease is then issued for a continuous period of twenty-one years, subject to royalty only.

During the year entries were granted for 4,478 quartz mining claims, of which number 4,328 were for claims in the western provinces, for the most part in Manitoba. Entries were also granted for 70 placer mining claims staked and applied for during the year, and 2,081 such claims, previously acquired, were renewed for another year.

Final leases have been granted for 868 mineral claims, comprising a total area of 47,175 acres, of which number 91 leases were issued during the fiscal year, comprising an area of 3,892 acres.

Quarrying.—Under the Quarrying Regulations, which provide for the disposal of Dominion lands containing limestone, granite, slate, marble, gypsum, marl, gravel, sand, clay and other like substances, 210 leases are now in force, comprising an area of 7,411 acres. The revenue collected from this source during the year amounted to $7,395.27.

Bituminous Sands.—The deposit of bituminous sands, commonly known as tar-sands, on the Athabaska river and its tributaries, covers an area of approximately five thousand square miles, of varying depth, density, and richness. Regulations have not been made for the disposal of this product, but no application for a location is considered until the applicant has submitted satisfactory evidence that he has acquired a process for the commercial recovery of the hydro-carbon content of such tar-sands, and has demonstrated the feasibility of such process. An area of 140 square miles of this deposit, being that of greatest richness and least overburden, has been reserved for tar-sand development purposes only.

The total revenue which has been derived from the disposal of tar-sand rights amounts to $40,733.89. Three leases are in force, comprising a total area of 3,643 acres, and on one of the locations a plant has been erected at a cost of over $30,000, for the recovery of the oil and bitumen.

Alkali.—Regulations have been made for the disposal of natural accumulations of soluble mineral salts, comprising, for the most part, sodium and magnesium sulphates, found in a comparatively pure condition in certain of the sloughs and shallow lakes of southern Saskatchewan. Under these regulations, 20 leases have been granted, comprising a total area of 9,815 acres, and the revenue derived from this source during the fiscal year amounted to $1,496.19. A number of these locations have been developed, plants for the purification and refining of the product have been erected at a very considerable cost, and large quantities of the refined salts have been disposed of to the different pulp and paper companies for use in the manufacture of certain grades of paper.

Gold Royalty.—The total amount which has been collected for royalty on gold obtained from placer deposits in the Yukon Territory up to March 31, 1928, was $4,935,350.71, of which amount $14,205.55 was collected during the fiscal year.

For the purpose of estimating royalty, the gold is valued at $15 an ounce, which is below its real value. The total value of the gold which has been produced from placer mining operations in that territory might conservatively be placed at $166,249,560.

Dredging.—Three leases to dredge for minerals in the beds of rivers in the Yukon Territory are now in force, comprising a total river stretch of 14·43 miles. The total revenue derived from this source up to March 31, 1928, amounted to $202,108.62. These leases comprise portions of the bed of the Klondike river.

For the purpose of gold recovery there are three dredges engaged in mining in the Yukon Territory, all of which are being operated by hydro-electric motive power.

Thirty-nine leases to dredge for minerals in the beds of rivers in Saskatchewan and Alberta, are now in force, having a total frontage of 187½ miles. Of these leases thirty-seven are in Alberta and two in Saskatchewan. The total revenue derived from this source amounted to $63,717.98, of which amount $4,644.61 was collected during the fiscal year.

Hydraulic Mining.—The regulations for the disposal of hydraulic mining locations in the Yukon Territory were withdrawn by Order in Council dated February 4, 1904, but the leases then in force were not affected by such withdrawal. There are still five hydraulic mining locations held under lease, comprising a total area of fifteen square miles. Rentals, amounting to $172,201.71, have been collected on account of such locations, the amount collected during the fiscal year being $1,573.89.

Water Rights.—There are now in force in the Yukon Territory 497 grants to divert water for mining purposes under the provisions of the Yukon Placer Mining Act, which grants aggregate a total of 12,832 miner's inches.

STATEMENT A.—Receipts on account of minerals in the western provinces and territories for the fiscal year

Petroleum and natural gas	$ 298,402 99
Coal rental	172,949 95
Coal royalty	239,349 34
Coal fees	2,290 00
Mining fees	127,195 91
Stone quarrying and clay	7,395 27
Quartz rental	7,665 84
Quartz royalty	107 35
Dredging leases	4,644 61
Registration and office fees	6,139 04
Tar sands rental	107 50
Tar sands royalty	17 08
Alkali rental	1,460 47
Alkali royalty	35 72
Sand, stone and gravel	94 00
Maps, plans, etc	1,100 90
Gypsum	95 00
Quartz acreage sales	48 60
Improvements	943 36
Information fees	114 50
Gold export tax	14,205 55
Free Certificates, export of gold	4 50
Hydraulic leases (Yukon)	1,573 89
Total	$ 885,941 37

STATEMENT B.—Showing the total amount of revenue from minerals collected in each district of the western provinces and territories during the fiscal year

Calgary	$ 254,894 32
Dauphin	1,762 30
Edmonton	210,222 89
Fort Smith, N.W.T	1,126 65
Grande Prairie	301 75
Kamloops	5,677 45
Lethbridge	214,922 69
Moose Jaw	25,607 42
New Westminster	2,877 53
The Pas (That portion of The Pas mining district in Manitoba)	56,543 50
The Pas (That portion of The Pas mining district in Saskatchewan)	5,409 23
Peace River	719 20
Prince Albert	11,605 77
Revelstoke	121 50
Winnipeg	45,863 37
Dawson, Gold Commissioner's office	25,793 89
Dawson, Royalty Collector's office	14,058 99
Mayo, Mining Recorder's office	6,236 51
Whitehorse, Mining Recorder's office	1,979 20
Whitehorse, Royalty Collector's office	151 06
Unorganized	66 15
Total	$ 885,941 37

The report for the fiscal year from the Gold Commissioner of the Yukon Territory dealing with mining in that territory is attached.

REPORT OF THE GOLD COMMISSIONER, DAWSON, YUKON TERRITORY, REGARDING MINING

Placer Gold Mining.—The amount of placer gold mined during the year on which royalty export tax was paid was 37,478.68 ounces, which is an increase over the previous year, export tax having been paid on 33,166.94 ounces in 1926-1927.

Burrall and Baird, Limited.—This company operated dredge *Canadian No. 2* on Hydraulic Mining Lease No. 18, below Bear creek. This dredge commenced digging on June 15, and closed down on December 5, having dredged 1,143,703 cubic yards of virgin ground. In all some one million cubic yards of ground were thawed by cold water process, the water for which was pumped from the Klondike river, and distributed by means of four electrically driven pumps. The constant use of three keystone drills was required throughout the season and one hundred and seventy-nine holes, totalling 4,784 linear feet, were sunk.

Dredge *Canadian No. 4* similar to *Canadian No. 2*, was sunk in the spring of 1924. It was raised by May 1 last year, and was repaired, equipped and in operation by November 14. The dredge is in a position to resume operations this year.

Dredge *Canadian No. 3* has not been operated since 1914 and was dismantled to keep the other two dredges of identical build supplied with necessary repair parts. New machinery has been ordered, and it is intended that this dredge will be placed in a position to commence operations during the coming season in the Klondike valley opposite Jackson gulch.

Included in the new equipment added in 1927 were three caterpillar tractors which were used for hauling supplies and materials to the different fields of operations.

The Twelvemile ditch which conveys water from the Twelvemile river to serve the hydraulic operations on the hillsides above the Klondike river and on Bonanza creek, was placed in a state of efficient repair. The first water reached the hydraulic mines on Lovett and Jackson gulches the early part of August.

A saw-mill with a capacity of 10,000 feet per day was erected at Bear creek, and the board roadbed of the Syphon bridge, crossing the Klondike river, at that place, was redecked.

The average number of men employed during a period of seven months was eighty-two, in addition to an average of thirty-six men employed for six months on the Twelvemile ditch and hydraulics.

The New North West Corporation, Limited.—Extensive operations were carried on during the season by this company and its subsidiaries, the Dominion Mining Company, Limited, the Big Creek Mining Company, Limited, and the Calder Mining Company, Limited.

The hydro-electric plant at North Fork was operated continuously throughout the year and generated a total of 8,019,500 K.W.H. Power was furnished to Burrall and Baird, Limited, to operate their dredges and other enterprises; to the Dominion Mining Company, Limited, the Big Creek Mining Company, Limited; also to the Dawson Electric Light and Power Company, Limited, for lighting the city of Dawson; and to the Dawson City Water and Power Company, Limited, to pump and heat the water furnished the city. The sixty miles of transmission lines connecting the power plant with the several sub-stations were maintained in an efficient state of repair.

A new high tension transmission line was constructed from Granville to Quartz creek, a distance of twenty miles, and a sub-station erected at Quartz creek.

Dredge *New North West No. 1* commenced digging on June 1, on Creek Claim No. 5 above Lower Discovery, on Dominion creek, and closed down on November 7, on Creek Claim No. 7-A. Gravel and bedrock to the amount of 582,771 cubic yards were dug. More than half of this was frozen ground and

had to be thawed by artificial means. A thawing plant of 1,600 points was operated by two electrically driven pumps, which supplied 6,000 gallons of water a minute under the pressure of approximately thirty pounds at the points.

Dredge *New North West No. 2*, of a type and capacity similar to *New North West No. 1*, commenced digging on May 16, on Creek Claim No. 240 below Lower Discovery, on Dominion creek, and closed down on November 7, having dug 636,615 cubic yards of gravel and bedrock, all of which was frozen. A thawing plant of 1,000 points was operated and for the greater portion of the season the water was furnished entirely through ditches constructed under authority of Water Grants Nos. 9024 and 9025. This was supplemented at times by the output from an electrically operated pump supplying 3,000 gallons a minute. The ditches were continually patrolled and maintained in a state of good repair. An area of 71,878 square yards was thawed in 1927.

A modern electric shovel was assembled and erected on Creek Claim No. 255 below Lower Discovery, on Dominion creek, and is ready to commence operations during the summer of 1928.

A steam shovel was erected on No. 38 Gold Run creek to be used in open-cut mining in connection with a cableway, which it is proposed to instal in the coming summer.

Operations on Quartz creek for the Calder Mining Company, Limited, a subsidiary of the New North West Corporation, Limited, consisted of the setting up of an electric shovel on Creek Claim No. 35 below A. Mack's discovery. The work was completed and the shovel started to dig in the month of October.

An average of one hundred men was employed for a period of seven months.

Assessment work on 1,111 mining claims owned or controlled by this company, its subsidiaries and associates, was done and renewal fees paid to the Mining Recorder.

Other Placer Operations.—In addition to what may be termed the large scale operations referred to above, many individuals and miners working in partnership were engaged in placer mining throughout the various parts of the Territory, and on the whole had a successful season.

Lode Mining.—Dawson District.—Development work has been continued on the Lone Star group of claims on Victoria gulch, but no ore was shipped during the year. An attempt is being made to obtain additional capital to prosecute development vigorously during the coming year.

A number of claims have been kept in good standing at the mouth of Fifteenmile on the Yukon river, and a few tons of ore have been taken out for shipment.

No development work has been done on the Indian River conglomerate, but a large number of claims are still being held with the hope of obtaining capital for development.

During the year a small group of claims has been staked on Eldorado creek and some development is being done, but no report of the results has yet been received.

Claims on Little Twelvemile river and on Gold Run are still being held but only representation work has been done.

Mayo District.—The principal producer in this district still continues to be Keno Hill, although a considerable quantity of ore has been shipped from Galena and Sourdough Hills. The principal operator is the Treadwell Yukon Company, Limited. This company mined some 35,000 tons of ore. The mill

operated 93 per cent of the total time and treated 44,687 tons of ore of which 25,284 tons were for their own company, 2,531 tons for the Keno Hill, Limited, and 16,872 tons from the Sadie claim under lease agreement. The company's mill in addition to treating its own ore, has also treated a large quantity for individual miners in the vicinity, which has been of great service to the smaller operators.

Shipments of ore have been continued from the Settlemier and Bermingham property on Galena Hill. A considerable amount of development work has been done on other properties in this vicinity. Small shipments have been made from Gordon and Johnson properties on Sourdough Hill.

In the Beaver River district prospecting and development has been carried on quite extensively, both by individual miners and by the Consolidated Mining Company of Canada, Limited. Many promising leads of ore have been uncovered and the district is rapidly progressing beyond the development stage.

In the southern end of the territory mining has been very active during the past twelve months, and the outlook is brighter than it has been for several years. In fact the future of the Yukon Territory as to lode mining never looked as promising as it does to-day. The Beaver country with its big lead deposits is rapidly coming to the front, the copper mines in the Whitehorse district will shortly be in the producing stage again, the Wheaton river is going ahead with outside capital, the silver-lead deposits below Dawson have possibilities, and high grade galena has also been located on Rude creek although considerable development work will have to be done yet to determine the extent of the deposits.

The territorial assayer at Keno has been kept busy during the year; 1,672 samples were received from various parts of the Territory, and 2,607 assays or quantitative analyses were made.

The advent of aeroplane service to different parts of the territory will undoubtedly be an inducement to those outside mining engineers who wish to come in, but cannot afford to spend the time usually taken to get into the country.

Coal.—The Five Fingers Coal Company operated their mine at Tantalus Butte during the year and shipped a considerable tonnage to Dawson.

REPORT OF THE CONTROLLER, TIMBER AND GRAZING LANDS BRANCH

The total amount of revenue derived from timber, grazing and hay lands, for the fiscal year ended March 31, 1928, was $1,416,719.84, and is the largest amount of revenue collected by this branch, to date. This is an increase of $198,806.02 over the amount of revenue for the previous fiscal year.

REVENUE

COMPARATIVE STATEMENT OF REVENUE

Year	Revenue $ cts.	Year	Revenue $ cts.
1918	569,607 39	1924	883,726 90
1919	516,938 53	1925	958,136 62
1920	687,401 83	1926	1,109,013 05
1921	807,119 23	1927	1,217,913 82
1922	723,322 81	1928	1,416,719 84
1923	886,064 37		

DETAILS FOR FISCAL YEAR 1927-28

Timber—		
Bonus under licence	$ 192,940 23	
Rent under licence	76,702 56	
Royalty under licence	507,625 74	
Permit fees, dues and rentals	410,115 63	
Seizure dues	17,529 35	
Licence fees	1,358 04	
Scaling fees	15,959 55	
Scale books	36 75	
Total for timber		$1,222,267 85
Fire Tax		26,739 54
Grazing, Hay, etc.—		
Grazing	$ 142,321 40	
Hay	10,592 89	
Registration fees	1,764 80	
Improvements	13,033,36	
Total for grazing, hay, etc		$ 167,712 45
Total revenue		$ 1,416,719 84

REVENUE RETURNS BY AGENCIES*

Agency	Revenue from timber	Revenue from fire-tax, grazing, hay, etc.	Total
Manitoba—			
Dauphin	$ 16,624 88	$ 1,935 71	$ 18,560 59
Winnipeg (Dominion Lands and Crown Timber Agencies)	172,399 82	5,144 78	177,544 60
Saskatchewan—			
Moose Jaw	123 10	71,532 97	71,656 07
Prince Albert	222,471 28	13,981 11	236,452 39
Alberta—			
Calgary	64,630 89	21,162 74	85,793 63
Edmonton	253,255 47	5,563 46	258,818 93
Grande Prairie	4,493 91	1,191 81	5,685 72
Lethbridge	40 74	42,959 47	43,000 21
Peace River	3,822 15	1,886 40	5,708 55
British Columbia—			
Kamloops	49,604 98	14,703 79	64,308 77
New Westminster	409,927 57	5,101 56	415,029 13
Revelstoke	24,873 06	9,288 19	34,161 25
Totals	$1,222,267 85	$ 194,451 99	$ 1,416,719 84

*In compiling the returns by agencies, moneys which were paid direct to Head Office, Ottawa, have been allocated to the agencies concerned.

TIMBER

The areas of timber berths held under licence and under permit are as follow:—

Province	Square miles under licence	Square miles under permit
Manitoba	1,037·08	1,011·66
Saskatchewan	754·06	136·57
Alberta	1,537·66	359·86
British Columbia	1,588·05	42·64
	4,916·85	1,550·73

During the year there were 432 new berths granted, namely: 20 licence, 23 permit, 149 fire-killed, 31 portable saw-mill, 200 cordwood and 9 fringe.

The total number of berths held under licence and under permit was 1,332, this being an increase of 102 berths over the previous fiscal year.

The following statements show the number of berths upon which operations were conducted, and also quantities of material which were manufactured and marketed, during the year under review.

Agency	Number of berths under licence	Number of berths under permit
Calgary	15	29
Edmonton	43	268
Prince Albert	41	107
Winnipeg	29	72
Kamloops	28	37
New Westminster	75	20
Revelstoke	13	31
Totals	244	564

MATERIAL MANUFACTURED AND MARKETED UNDER LICENCE AND UNDER PERMIT

Material	Under licence		Under permit	
	Manufactured	Marketed	Manufactured	Marketed
Lumber ft. B.M.	378,552,082	386,652,813	53,224,877	51,011,848
Railway ties number	410,520	428,040	1,298,543	1,389,824
Laths pieces	24,886,521	31,570,633	3,077,150	2,672,700
Shingle bolts cords	26,980	28,802	2,676	2,220
Piling, cribbing, etc lin. ft.	305,546	310,866	199,261	235,311
Mining timber lin. ft.	1,668,098	1,677,052	756,708	598,106
Telepnone poles lin. ft.	3,095,750	3,095,637	739,659	791,951
Fence posts number	127,624	122,933	128,309	112,280
Cordwood cords	12,544	11,509	30,869	27,357
Slabs cords	12,745	49,599	259	259
Pulpwood cords	19,250	14,404	44,305	47,047
Boxwood cords	2,672	2,672	.....	.....
Mine ties number	.....	.....	8,569	8,569
Fence rails number	.....	.....	2,650	4,019

NOTE.—Where the material sold is in excess of the quantity shown as manufactured, such excess has to be considered as being part of the material manufactured in the previous fiscal year, but not marketed during that year. In addition to the material shown in the above table there were 127 cords of lath bolts and 265,828 pieces of lath bolts manufactured and marketed under permit.

Owing to the comparatively favourable conditions which existed in Manitoba, Alberta, Saskatchewan and British Columbia during the past year, there was an increased activity in the lumber industry both as regards operations and sales, which increase is reflected in the quantities manufactured and marketed, as compared with previous years, and also in the net increase in the amount of revenue derived from timber dues and rental, etc., this latter increase amounting to $188,147.37 above the revenue for the previous year; the collections at every agency, with one exception showed an increase.

With regard to commodities manufactured and marketed during the fiscal year under review, it will be observed from the following table that there has been an increase in the quantities of practically every class of material over those of the previous year:—

Material	Increase	
	Manufactured	Marketed
Lumber ft. B.M.	49,624,293	87,264,004
Railway ties number	435,496	807,991
Mining timber lin. ft.	691,509	790,805
Telephone poles lin. ft.	582,612	3,013,647
Pulpwood cords	47,760	47,096
Cordwood and slabs cords	16,485	52,934

GRAZING

The total area held under lease as of March 31, 1928, was 6,727,015 acres, comprised in 10,601 leases as follow:—

Province	Number of leases	Area under lease
		acres
Manitoba	231	70,386
Saskatchewan	6,517	3,329,484
Alberta	3,562	2,965,359
British Columbia	291	361,786
	10,601	6,727,015

This is an increase of 524,760 acres over the acreage in the previous fiscal year. During that period there were 2,073 new leases issued.

On December 31, 1927, there were 9,777 grazing leases in existence covering an area of 6,607,183 acres. During the year 1927 stock returns were received showing the cattle grazing on 9,272 ranches, which was approximately 95 per cent of the whole number of Government grazing leaseholds. These returns indicated that the following numbers of live stock were being maintained: cattle, 263,742 head; horses, 127,782 head; sheep, 123,068 head; total, 514,592 head.

REPORT OF THE SUPERINTENDENT, ORDNANCE, ADMIRALTY, AND RAILWAY LANDS BRANCH

The work of administering lands dealt with in the Ordnance, Admiralty, and Railway Lands Branch has, as in the year previous, shown an increase both in the area of the lands dealt with and the revenue obtained as a result of placing new lands under remunerative occupation.

Ordnance and Admiralty Lands.—The established policy followed in former years has been consistently observed, that of bringing as many of these properties into a revenue-producing state as possible, and of clearing these lands of such encumbrances as may have become attached to them. The localities in which the work was carried on are widely scattered, as in addition to the work in Ontario and Quebec, negotiations and other operations were carried on in British Columbia and the Maritime Provinces. A very small percentage of Ordnance Lands is suitable for agricultural purposes, the greater portion of such lands being located in cities and towns. They are therefore more suitable for commercial, industrial and residential purposes than for farm lands, and, as might be supposed, are usually dealt with in very small parcels.

Thirty-three parcels of land which hitherto were not a source of revenue to the department were placed under lease, the annual rental value of the same being $1,523.90. The amount when estimated on the basis of the rents is 6 per cent of the valuation, and represents an addition of $25,000 to the valuation of the lands of the branch.

In handling these lands, as a result of observation of the disposal of private lands in similar localities, it has been decided that the expenditure of a limited amount of money upon improvements of Ordnance parcels would be advisable, such as the construction of roads to make them accessible, the planting of trees to make the parcels attractive to prospective tenants, and the draining of certain low lands where such could be done cheaply. These works were begun or carried out in several localities by the survey and engineering staff of the branch as part of the regular administration of the properties. As many of the parcels of Ordnance lands were located, and the surveys thereof made, more than 100 years ago the boundaries have, in many cases, suffered consider-

able changes. These changes have been due to the natural changes in water boundaries and the construction of roadways, railways and other works, and also due to the disposal of small portions from time to time. These conditions make it necessary in most cases to have a resurvey of the boundaries made. These surveys and the resultant plans are all closely made in conformity with the acts and regulations of the province in which the lands are situated.

The Ordnance lands in British Columbia, most of which have only recently come under the control of this department, were inspected during the summer of 1927 with a view to deciding the best use to which each parcel could be put, and several valuable areas in regard to ownership having been settled were valuated to ascertain what revenue could ultimately be expected.

On the basis of the reports received steps are being taken to develop these lands to best advantage, but some time will elapse before tangible results can be obtained.

Since, as already explained, Ordnance lands are widely scattered in British Columbia and in the eastern provinces, and as it is not generally known what lands constitute Ordnance lands, many requests from the general public in respect to vacant lands are forwarded to this branch for attention. All such requests receive careful consideration and searches are made to ascertain if the land is administered by any department at Ottawa. If such is found to be the case the letter is forwarded direct to that department for reply, but if the land is provincial land or privately controlled, the applicant is definitely advised how to proceed to obtain the information required.

Railway Lands.—The work of this division relates to the granting of lands to railway companies as an aid to construction, and to the administration of Government townsites.

During the past year 4,800 acres were patented to the Canadian Pacific Railway Company on Main Line Exchange Account, and 5,755·81 acres to the Alberta Railway and Irrigation Company on Exchange Account. Negotiations have been carried on with the Canadian Pacific Railway Company relative to the revestment of over 7,000 acres of lands required by the National Parks of Canada Branch.

Considerable time has been spent in negotiations and adjustments of claims by certain railway companies in respect to the mineral rights of lands, the surface rights of which have been patented to the companies or the nominees of the companies. Considerable progress has been made in this respect. The dealings with regard to these matters have become very much involved, but it is expected that satisfactory conclusions will be reached.

While the final transfer of lands to the railway companies on subsidy account is about concluded there remain several matters, such as the above, to be disposed of before these accounts can be closed out.

REPORT OF THE FINANCIAL CONTROLLER

SUMMARY of net revenue collected from various sources during the fiscal year 1927-28

Statement A—Dominion Lands	$ 3,689,074 59
" B—School Lands	2,068,159 10
" C—Ordnance Lands	14,205 88
" D—Registrar's Fees	316 00
" E—Casual Revenue	14,318 07
" F—Fines and Forfeitures	3,622 98
" G—Seed Grain and relief repayments	305,980 94
	$ 6,095,677 56

STATEMENT H is a recapitulation of Dominion Lands revenue by subheads, and statement I shows a comparison of this revenue with that of last year.

STATEMENT A—Dominion Lands Revenue for the fiscal year 1927-28

Agency	Agency payments	Head Office payments	Total revenue
	$ cts.	$ cts.	$ cts.
Dominion Lands—			
Calgary	64,840 33	4,693 32	69,533 65
Dauphin	4,313 40	240 15	4,553 55
Edmonton	27,508 25	5,996 04	33,504 29
Grande Prairie	12,960 04	120 51	13,080 55
Kamloops	2,939 29	27 00	2,966 29
Lethbridge	54,957 18	5,846 29	60,803 47
Moose Jaw	460,862 16	72,342 06	533,204 22
New Westminster	6,226 03	295 64	6,521 67
Peace River	13,382 08	1,088 05	14,470 13
Prince Albert	64,137 53	29,904 82	94,042 35
Revelstoke	1,746 27	15 00	1,761 27
Winnipeg	11,363 95	1,217 97	12,581 92
Miscellaneous	10,253 00	23,303 81	33,556 81
	735,489 51	145,090 66	880,580 17
Crown Timber—			
Calgary	79,614 62	5,412 13	85,026 75
Dauphin	18,337 26	223 33	18,560 59
Edmonton	255,942 14	1,498 80	257,440 94
Grande Prairie	5,472 70	213 02	5,685 72
Kamloops	57,229 65	132 43	57,362 08
Lethbridge	33,963 39	9,036 82	43,000 21
Moose Jaw	56,238 15	15,417 92	71,656 07
New Westminster	410,038 57	3 68	410,042 25
Peace River	5,365 72	342 83	5,708 55
Prince Albert	231,695 09	3,948 31	235,643 40
Revelstoke	24,749 80	211 52	24,961 32
Winnipeg	173,839 89	1,050 80	174,890 69
	1,352,486 98	37,491 59	1,389,978 57
Forestry—			
Alberta Inspectorate	53,642 54	1,098 06	54,740 60
British Columbia Inspectorate	10,224 09	12,544 08	22,768 17
Manitoba Inspectorate	25,767 23	2,059 71	27,826 94
Saskatchewan Inspectorate	95,221 27	1,975 98	97,197 25
Indian Head Nursery Station	3,622 36	.....	3,622 36
Forest Products Laboratory, Vancouver	.....	475 04	475 04
	188,477 49	18,152 87	206,630 36
Water Power and Reclamation—			
Calgary	1,455 43	368 35	1,823 78
Edmonton	530 34	791 95	1,322 29
Grande Prairie	.....	163 80	163 80
Lethbridge	210 00	1,411 03	1,621 03
Moose Jaw	147 49	8,199 08	8,346 57
New Westminster	.....	1,243 48	1,243 48
Prince Albert	44 80	571 16	615 96
Winnipeg	155 82	51,374 41	51,530 23
	2,543 88	64,123 26	66,667 14
Mining—			
Calgary	186,489 83	68,404 49	254,894 32
Dauphin	1,472 65	289 65	1,762 30
Edmonton	*150,091 99	60,610 90	210,702 89
Grande Prairie	261 60	40 15	301 75
Kamloops	5,525 45	152 00	5,677 45
Lethbridge	184,723 97	30,198 72	214,922 69
Moose Jaw	19,289 39	6,318 03	25,607 42
New Westminster	2,655 99	221 54	2,877 53
The Pas	61,079 05	873 68	61,952 73
Peace River	261 60	457 60	719 20
Prince Albert	9,454 92	2,150 85	11,605 77
Revelstoke	99 80	21 70	121 50
Winnipeg	44,909 96	951 41	45,863 37
Unorganized Territory	.....	66 15	66 15
	666,316 20	170,758 87	837,075 07

STATEMENT A—Dominion Lands Revenue for the fiscal year 1927-28—*Con.*

Agency	Agency payments	Head Office payments	Total revenue
	$ cts.	$ cts.	$ cts.
National Parks of Canada—			
Antelope	.....	576 00	576 00
Brereton Lakes	.....	20 00	20 00
Buffalo	19,627 96	60,496 35	80,124 31
Elk Island	181 50	.....	181 50
Fort Anne	.....	11 25	11 25
Glacier	82 16	56 00	138 16
Jasper	27,683 58	5,124 64	32,808 22
Lake Florence	.....	55 00	55 00
Kootenay	8,040 20	56 00	8,096 20
Point Pelee	.....	89 00	89 00
Prince Albert	36 50	.....	36 50
Rocky Mountains	141,160 10	2,307 54	143,467 64
Waterton Lakes	5,666 73	217 00	5,883 73
Yoho	3,073 68	582 15	3,655 83
Vidal Point	.....	80 00	80 00
Historic sites	.....	6 00	6 00
Miscellaneous	.....	113 25	113 25
	205,552 41	69,790 18	275,342 59
Northwest Territories—			
Fort Smith	3,632 21	43,389 15	47,021 36
Yukon Territory—			
Dawson	52,845 90	1,071 89	53,917 79
White Horse	6,195 51	.....	6,195 51
	59,041 41	1,071 89	60,113 30
*Total revenue	3,213,540 09	549,868 47	3,763,408 56
Less refunds	.....	.....	74,333 97
*Net revenue	.....	.....	3,689,074 59

* This amount includes $480 scrip.

STATEMENT B—School Lands Revenue for the fiscal year 1927-28

Province	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Manitoba	59,316 86	740 90	58,575 96
Saskatchewan	1,179,614 25	8,724 94	1,170,889 31
Alberta	846,369 65	7,675 82	838,693 83
	2,085,300 76	17,141 66	2,068,159 10

STATEMENT C—Ordnance Lands Revenue for the fiscal year 1927-28

Fiscal year	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
1927-28	14,221 02	15 14	14,205 88

STATEMENT D—Registrar's Fees for the fiscal year 1927-28

Registration District	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Yukon Territory	350 79	34 79	316 00

STATEMENT E—Casual Revenue for the fiscal year 1927-28

Fiscal year	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
1927-28	14,378 32	60 25	14,318 07

STATEMENT F—Fines and Forfeitures for the fiscal year 1927-28

Authority for imposition of penalty	Gross revenue	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Dominion Parks Regulations	1,797 98	.....	1,797 98
Forestry Regulations	160 00	.....	160 00
Migratory Birds Convention Act	982 00	.....	982 00
Northwest Game Act	164 50	.....	164 50
Northwest Territory Act	378 50	.....	378 50
Indian Act	50 00	.....	50 00
Criminal Code of Canada	90 00	.....	90 00
	3,622 98	.....	3,622 98

STATEMENT G—Seed Grain and Relief Repayments for the fiscal year 1927-28

Year	Gross collections		Refunds		Net revenue	
	Principal	Interest	Principal	Interest	Principal	Interest
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1876	100 28	340 36	.....	.....	100 28	340 36
1886-7-8	77 30	99 84	.....	.....	77 30	99 84
1890	30 90	67 83	.....	.....	30 90	67 83
1894	76 48	128 08	.....	.....	76 48	128 08
1895	367 14	620 31	.....	.....	367 14	620 31
1896	203 84	236 58	.....	.....	203 84	236 58
1900	6 15	10 59	.....	8 74	6 15	1 85
1908	473 33	527 12	.....	35 31	473 33	491 81
1909	25 45	14 90	.....	.....	25 45	14 90
1911	804 30	585 86	.....	6 41	804 30	579 45
1912	1,852 20	1,623 98	39 83	58 86	1,812 37	1,565 12
1913	505 77	379 07	.....	.....	505 77	379 07
1914	1,321 41	917 69	.....	.....	1,321 41	917 69
1915	108,609 29	72,938 81	1,099 11	1,947 83	107,510 18	70,990 98
1917	2,161 04	1,200 19	27 37	10 31	2,133 67	1,189 88
1918	9,893 35	5,838 97	138 47	245 38	9,754 88	5,593 59
1919	15,153 82	12,003 29	393 08	452 94	14,760 74	11,550 35
1920	14,509 05	10,213 88	48 85	74 72	14,460 20	10,139 16
1921	2,524 18	1,373 26	.....	15 88	2,524 18	1,357 38
1922	1,701 39	898 09	37 55	6 59	1,663 84	891 50
1925	871 74	211 43	2 53	9 86	869 21	201 57
Relief prior to 1915	310 22	280 76	.....	2 96	310 22	277 80
Relief 1920-27	27,930 77	13,173 54	1,483 52	1,066 79	26,447 25	12,106 75
	189,509 40	123,684 43	3,270 31	3,942 58	186,239 09	119,741 85

STATEMENT H—Cash Receipts on Account of Dominion Lands Revenue for the fiscal year 1927-28

Source of revenue	Gross receipts	Refunds	Net revenue
	$ cts.	$ cts.	$ cts.
Homestead fees	72,551 00	330 00	72,221 00
Improvements	59,971 75	27,600 54	32,371 21
Sales of land	732,323 76	4,249 00	728,074 76
Map sales, rentals, office fees, etc	56,041 28	3,192 94	52,848 34
Liquor permits, game licences, etc	42,753 50	398 50	42,355 00
Timber dues	1,388,140 48	25,239 69	1,362,900 79
Grazing leases and hay permits	174,493 60	5,255 47	169,238 13
Irrigation and water power	50,922 81	362 00	50,560 81
Coal petroleum, mining fees, etc	878,505 82	5,863 72	872,642 10
National Parks of Canada	275,342 59	173 41	275,169 18
Miscellaneous	31,881 97	1,668 70	30,213 27
	3,762,928 56	74,333 97	3,688,594 59

STATEMENT I—Gross Receipts on Account of Dominion Lands Revenue compared with the previous fiscal year

Particulars	1927-28	1926-27	Increase
	$ cts.	$ cts.	$ cts.
Dominion Lands	880,580 17	659,819 52	220,760 65
Crown Timber	1,389,978 57	1,193,905 20	196,073 37
Forestry	206,630 36	199,190 88	7,439 48
Water Power and Reclamation	66,667 14	51,401 99	15,265 15
Mining	†837,075 07	972,738 51	*135,663 44
National Parks of Canada	275,342 59	238,239 19	37,103 40
Northwest Territories	47,021 36	39,237 22	7,784 14
Yukon Territory	60,113 30	64,021 44	*3,908 14
	3,763,408 56	3,418,553 95	344,854 61

* Decrease.
† Including $480 scrip.

II

FORESTRY

REPORT OF THE DIRECTOR OF FORESTRY, E. H. FINLAYSON

Of considerable significance to Forest Service administration is a greater manifestation of an enlightened public opinion taking cognizance of the importance of science in the development of natural resources. Nowhere is this more evident than in the steady change in the public attitude towards the work of the Forest Service and in the recognition of its place in the scheme of economic development throughout Canada. Indicative of advance is the increasing interest in the practical application of scientific methods in numerous basic industries, resulting in requests for technical information, advice, and assistance received by every division of this service.

Timber losses from fire were relatively low during the season of 1927. This was largely due to generally favourable weather conditions, but also in no small part to increased efficiency in fire-protective organization. This has been brought about largely through the acquisition of larger supplies of up-to-date fire-fighting equipment, the continued study of fire-weather forecasting, and the construction of more improvements, so ensuring better facilities for detection, communication, and transportation. The value of aircraft has been demonstrated more fully for both detection and suppression of fire, particularly in the unsettled northern portions of the Prairie Provinces, while aerial surveying has proved of great value in forest reconnaissance.

Forest research continues to expand in every part of the Dominion, the service co-operating in many instances with provincial governments and private companies. Each year sees a fuller realization of the economic and aesthetic value of the tree-planting work on the prairies. Forest-products research is more and more becoming of the greatest concern to wood-using industries, as shown by the rapidly increasing number of requests for information, by the application of the results of laboratory tests, and by active industrial co-operation in many experimental projects.

A distinct advance has been made in publicity work as a result of better organized campaigns, more extensive exhibits, and carefully prepared courses of lectures. That such work is bearing fruit is evidenced by more requests for active participation in publicity work of all kinds and the quickened general interest in the extent of the timber resources and their protection and proper utilization. Steadily and surely there is developing in the people of Canada a forest-conscious mind.

Fires and Fire Protection

The fire season was an unusually favourable one, the total number of fires reported being much less than that reported annually for many years past.

In Manitoba, the spring fire-hazard was absent. There were many lightning fires in the northeastern part of the province. The season, on the whole, was satisfactory, and the number of fires was the lowest for several years. The total number of fires reported was 110; fires inside national forests, 18; area burned over within national forests, 179 acres; total area burned over, 26,225 acres (the lowest for seven years); area of merchantable timber burned, 10,889 acres; area of young growth, 9,209 acres. Both detection and suppression were carried on largely from aeroplanes; by May 29 all sub-bases were in operation, and they continued their work until the middle of October. A marked strengthening of public opinion in favour of forest protection is noted in this province.

In Saskatchewan, the season was a normal one. There were four short seasons of fire-hazard. The largest fires occurred in the north of the province. Air patrol was extended over the northern part of the province, both for detection and suppression. All machines were busy from July 23 to the end of August. Patrols were again started in March, 1928, with the object of locating trappers' fires. Total number of fires, 109; fires in national forests, 12; area burned over inside national forests, 3,281 acres; total area burned over, 234,278 acres; area of merchantable timber burned, 79,796 acres; area of young growth burned, 83,182 acres.

In Alberta, the weather conditions were unusually favourable, the precipitation being very abundant generally. Some danger arose in the country north of the 56th parallel from the latter part of August to the first week of November and elsewhere (especially on the Eastern slope) through no rain having fallen. The frosts, however, were unusually late, and so conditions were ameliorated. A few dry thunderstorms occurred. The aeroplane patrol was carried out as in several years preceding, and a system of lookout towers was started. The fire-permit system inaugurated by the provincial authorities for the burning of settlers' slash now seems to be working pretty well. Total number of fires, 211; fires in national forests, 5; area burned over within national forests, 1 acre; total area burned over, 36,998 acres; area of merchantable timber, 6,433 acres; area of young growth, 3,901 acres.

In British Columbia, the fire-hazard was the lowest for years, owing to weather conditions. Heavy rains were frequent during all the summer except in the latter part of July and August. The total number of fires was 231; fires within national forests, 7; total area burned over within national forests, 1,382 acres; total area burned over, 2,977 acres; area of merchantable timber burned over, 1,079 acres; area of young growth burned over, 661 acres.

The total number of forest fires on Dominion lands protected by the Forest Service was thus 661; total number of fires within national forests, 40; total area burned over within national forests, 4,746 acres; total area of Dominion lands under the protection of the Forest Service burned over, 293,503 acres; area of merchantable timber burned over, 98,207 acres; area of young growth burned over, 100,308 acres.

Ready co-operation was secured from the staff of the Directorate of Civil Government Air Operations in the fire-protection work of this service.

FIRES WITHIN NATIONAL FORESTS

Cause	1927				1926		1925	
	No.	Per cent of total	Total amount of loss caused	Per cent of total loss	No.	Per cent of total	No.	Per cent of total
			$					
Camp-fires	13	33·0	61	1·0	30	20·0	36	20·0
Smokers	1	2·5	.....	.....	18	12·0	13	7·0
Settlers	5	12·0	897	14·5	29	19·0	44	24·0
Railways	1	2·5	32	0·5	14	9·0	32	18·0
Lightning	15	37·0	3,840	61·0	18	12·0	9	5·0
Lumbering	2	5·0	.....	.....	3	2·0	.....	.....
Incendiary	3	8·0	150	2·5	22	15·0	23	13·0
Public works	.....	.....	.....	.....	2	1·0	4	2·0
Unclassified	.....	.....	.....	.....	5	3·0	8	4·0
Unknown	.....	.....	1,271	20·5	10	7·0	13	7·0
Totals	40	100·0	6,251	100·0	151	100·0	182	100·0

FIRES OUTSIDE NATIONAL FORESTS

Cause	1927				1926		1925	
	No.	Per cent of total	Total amount of loss caused	Per cent of total loss	No.	Per cent of total	No.	Per cent of total
			$					
Camp-fires	114	19·0	623,527	76·0	212	17·0	161	16·0
Smokers	55	9·0	18,824	2·3	86	7·0	84	9·0
Settlers	127	20·0	4,834	0·7	238	19·0	148	15·0
Railways	145	23·0	2,464	0·3	301	24·0	239	24·0
Lightning	116	19·0	36,014	4·4	164	13·0	139	14·0
Lumbering	6	1·0	.....	.....	21	2·0	21	2·0
Incendiary	23	4·0	76,218	9·3	56	4·5	45	5·0
Public works	3	.....	2	.....	.....	.....	.....	.....
Unclassified	7	1·0	27	.....	26	2·0	27	3·0
Unknown	25	4·0	56,214	7·0	143	11·5	119	12·0
Totals	621	100·0	818,124	100·0	1,247	100·0	983	100·0
TOTAL FIRES ON DOMINION LANDS PROTECTED BY FOREST SERVICE								
Camp-fires	127	19·0	623,588	75·5	242	17·0	197	17·0
Smokers	56	8·5	18,824	2·5	104	7·0	96	8·0
Settlers	132	20·0	5,731	0·7	267	19·0	192	16·5
Railways	146	22·0	2,495	0·3	315	23·0	272	23·2
Lightning	131	20·0	39,854	5·0	182	13·0	148	13·0
Lumbering	8	1·0	.....	.....	24	2·0	21	2·0
Incendiary	26	4·0	76,368	9·0	78	6·0	68	6·0
Public works	3	0·5	2	.....	2	.....	4	0·3
Unclassified	7	1·0	27	.....	31	2·0	35	3·0
Unknown	25	4·0	57,485	7·0	153	11·0	132	11·0
Totals	661	100·0	824,375	100·0	1,398	100·0	1,165	100·0

Improvements

The work accomplished is synopsized in the following table:—

	Number		Miles
Ranger station houses	5	Telephone lines	97
Cabins	31	Roads	101
Stables (12) and barns (6)	18	Trails	322
Exhibition cabin	1	Fireguards (cleared)	79
Other buildings	28	Fireguards (ploughed)	332
Bridges	8	Fences	18
Ferry	1		
Lookout towers	11		
Lookout stations	8		
Plantation nurseries	18		

Grazing

The grazing of live stock under permit continues to be one of the most important secondary uses of national forest lands. For the past seven or eight years, however, there has been a marked period of depression in the stock industry. Naturally, therefore, herds were cut down with a consequent curtailment of production. Within the last year there has been an upward trend in market prices of both cattle and sheep. At the present time there is a general optimistic outlook throughout the country in connection with the industry.

In the three Prairie Provinces there were decreases during the year in the number of stock grazed on forest ranges. This was no doubt due in part to the very favourable growing season which provided abundant forage on lands outside of national forests. In British Columbia there was an increase in the use of forest range, and there are indications that the demand for high-altitude sheep range for the summer months will rapidly increase in the near future.

Regulated grazing is a protection to forests. Unutilized forage may constitute a serious autumn fire-hazard. It is most desirable, therefore, that the forest ranges should be fairly well stocked, both from the standpoint of forest protection and from that of efficient utilization of forest resources. With more encouraging market conditions in sight for the stock-raising industry, it is expected that the national forests will be called upon to care for a greatly increased number of stock.

Timber Operations

The report of the Manitoba inspectorate shows eleven active timber sales and a keen demand for timber permits. Cutting on the pulpwood berths was supervised by the Forest Service, as were also the operations of a large lumber company on lake Winnipeg.

The report of the Saskatchewan inspectorate shows fifty-two active sales. Twenty-eight new sales were awarded during the year. There has been a large increase in the sales of pulpwood. Brush disposal has been satisfactory. In one instance the operator has found that his logging costs showed a decrease, owing to the fact that the logs are more easily handled after brush disposal, with the result that he can get the work done with a smaller number of 'swampers'.

In the Alberta inspectorate there were twenty-two timber sales, of which eight were new. Several applications for large sales were being dealt with.

In British Columbia there was a great increase in timber-sale business and a correspondingly increased revenue from this source. The increase in the cut in the Tranquille Forest district was especially noteworthy. Twenty-two new sales were inaugurated, fourteen of which were in the Shuswap Forest district and eight in the Tranquille district. The revenue for the whole inspectorate from timber sales and timber permits is greater than that of any previous year.

During the year a new feature of forest management was introduced into the field operations of the service by the establishment of supervisors' timber sales dealing with bodies of timber of moderate size.

Seeding and Planting on National Forests

Approximately 200,000 seedlings were planted on various national forests, covering in all about 100 acres. In Alberta 33 acres were seeded, and experimental seeding was carried on in the Sandilands national forest in Manitoba. In British Columbia 200 acres were seeded to Western cedar. The seeding and planting so far carried on in the national forests is of an experimental nature only. In Saskatchewan a number of nurseries are being developed in connection with the national forests, with the idea of ultimately undertaking a definite yearly planting program. These nurseries contain a stock of over 3,000,000 seedlings.

Recreational Uses of the National Forests

The use of the national forests for purposes of recreation and sport affords a most valuable means of educating the public as to the value of the forests, and efforts are continued to meet the general desire for this forest use.

Manitoba now has five summer resorts, and plans are under way for the creation of another resort at Clear Lake, in the Riding Mountain national forest. It is estimated that the number of visitors to the resorts of this province during the season was about 8,400. Some work was done in restocking Madge and Clear lakes with pickerel.

Saskatchewan has three resorts, and it is estimated that the number of visitors for the season was 10,500. Of these, 8,000 visited the Fish Lake summer resort, in the Moose Mountain national forest.

Alberta has one resort at Elkwater lake in the Cypress Hills national forest; this had about 3,750 visitors. There are also many localities throughout the national forests of this district that are particularly well adapted for camping and fishing; some of these are visited by large numbers of persons.

British Columbia has two resorts, and two automobile camps have been built in the national forests. New trails are also being cut to Hyas Long lake, the haunt of large-sized Kamloops trout. Six thousand feet of ditch were dug from Walloper lake to Trout lake in order to facilitate the spawning of fish. The excellent fishing within national forests continues to attract tourists from distant points.

Surveys

The most extensive survey work of the year was that carried on throughout the summer in the Manitoba pulpwood selection area. Ten parties of ten men each were at work, and covered a total area of between 12,000,000 and 13,000,000 acres. The work of this survey was greatly aided by the Directorate of Civil Government Air Operations and the Topographical Survey, who co-operated in the preparation of aerial maps. These maps, which were prepared from oblique photographs taken from lines flown at six-mile intervals at an altitude of from 4,500 to 5,000 feet, showed all the topographical features, such as lakes, streams, and open muskegs, with such accuracy that it was unnecessary to run baselines. The forested area was classified into five grades based on the density of crown cover. With these maps and the photographs, the ground parties were able to concentrate their attention on the areas carrying merchantable timber and young growth of future value, and a very great deal of time was saved by not having to traverse the unproductive land. Further, no timbered areas escaped observation.

Similar surveys were made in an area of 150,000 acres along the Nelson river near Norway House, and 200,000 acres along the west coast of lake Winnipeg, north of the Saskatchewan. In January, February, and March, 1928, 180,000 acres on the Overflowing river, in Manitoba, were surveyed.

More intensive surveys were also made of areas in national forests, aggregating 50,000 acres. In Saskatchewan, a working-plan survey of 10,700 acres was made in the Fort à la Corne national forest, and sample plots were laid out to cover an area of 49,000 acres in the Lost River Block, in that forest. In the Pasquia national forest a stock-taking survey was made of 87,680 acres, and a number of land-classification surveys were made in the Keppel and Big River forests.

Seed Collection and Extraction

The New Westminster seed-extraction plant furnished the largest proportion of forest tree seed obtained during the year; here a total of 2,706¾ pounds of seed was extracted. Of this quantity, 1,547 pounds were Sitka spruce, and 567 pounds lodgepole pine, with smaller quantities of Douglas fir, Western hemlock, Western (red) cedar, Western white pine, Western yellow pine, Engelmann spruce, and Western larch. The Sitka spruce was nearly all sent to the British Forestry Commission, and the Douglas fir to New Zealand. New Zealand also received cedar, Western white pine, and yellow pine. Small quantities were also sent to investigators and experimenters in many other places. At the other seed-extraction plants, seed was produced for local use, Red pine from Manitoba, white spruce and jack pine from Saskatchewan, and lodgepole pine from the Cypress Hills forest, Alberta.

Tree-Planting on Prairie Farms

After a long cold winter weather conditions through the spring and summer were very favourable for nursery work and general tree-planting operations, and, on the whole, the season was the most favourable for many years for start-

ing new plantations. There was considerable damage from hail-storms in some localities, but with rare exceptions plantations soon recovered from damage of this description. There was practically no winter-killing. Considerable damage was caused by rabbits, but apparently a satisfactory protection has been found in lightly smearing the young trees with axle grease.

Over seven and one half million trees were sent out in the spring of 1927—7,430,350 broad-leaved seedlings and cuttings and 117,240 evergreens. Recipients of broad-leaved trees numbered 5,923 and those of conifers 1,170. National forests in Manitoba received 92,500 trees.

The inspection list included 12,530 names—1,350 more than that of the previous season; of these, 3,600 were new applicants. One additional inspector had to be employed, making nine in all. The inspection showed 98 per cent of the maple, ash, and caragana seedlings planted in the spring were thriving, and 95 per cent of willow and poplar cuttings well rooted. Of the evergreens only six per cent of the spruce, four per cent of the jack pine, eight per cent of the Scotch pine, and six per cent of the lodgepole pine were failures. This showing is exceptionally good.

The influence of the farm shelter-belt on horticultural development is very marked. Where, not many years ago, it was the exception to find a farm with a good garden, inspectors last season found that 90 per cent of the farms visited had good vegetable gardens. Still more marked is the increase in fruit growing as a result of the shelter-belts, even in districts considered least favourable for tree growing. Another favourable result of the planting of wind-breaks is shown by the splendid success obtained in growing evergreens under their shelter.

At Indian Head the stock was the best produced for several seasons. At Sutherland growth was not as vigorous, and hence a certain proportion of the stock was carried over for an extra year. Results with coniferous transplants and seed-beds at Indian Head have been much improved owing to the installation of an efficient artificial watering system.

An attack of mites threatened the white spruce transplant beds, but was controlled by spraying. Pine leaf scale and red spiders are proving somewhat troublesome on the white spruce. The bronze birch borer has caused the death of a large number of birch trees in the permanent plantations. The necessity of cutting out the birches so destroyed has increased the amount of thinning done in the permanent plantations. In addition to fuel-wood, fence-posts and pickets were obtained in the larch (tamarack) plantations, where the Siberian species seems to be making a better showing than the native species.

Tests of treated fence-posts are being continued, creosote and zinc chloride being the preservatives used. Creosoted Russian poplar fence-posts, set in the spring of 1917, continue sound, though untreated posts of the same species, set at the same time, rotted out in three years at most.

Many thousands of visitors again visited the nursery stations during the year.

The permanent plantations have now reached the stage where research work, such as has been already begun on a small scale, will give very valuable results.

Forest Products Laboratories of Canada

Forest-products research has been carried on in Canada for several years in two laboratories, the main one in Montreal and a branch laboratory in Vancouver devoting attention to problems relating particularly to British Columbia timbers.

The year under review was marked by the reorganization of the work of the main laboratories in Eastern Canada. The timber-testing, wood-preservation, timber-physics, and timber-pathology laboratories have been transferred from

Montreal to Ottawa, where greatly enlarged accommodation has been provided. The pulp and paper laboratory remains in Montreal. Substantial progress has been made in the work of all the laboratories in spite of the interruptions in the main laboratories due to the changes.

The chief problems being investigated in regard to the preservation of wood are the protection of timber from marine borers, which frequently infest wood in salt water; the creosote treatment of hard maple railway ties at high moisture contents; the investigation of the possibilities of shale oil as a wood preservative, by itself or in combination with other toxic constituents, and the behaviour of ties (especially those affected with red rot and red stain) in track under actual service conditions.

Among the problems of fundamental research in timber physics now being undertaken is an investigation into the relation between the rate of growth and the density of the wood of white spruce. This is a matter of considerable importance from a silvicultural standpoint, and is also of particular significance to the pulp and paper industry. The study of the structure of the different Canadian woods is being continued. Investigations of the seasoning of lumber both by kiln-drying and air-seasoning have been actively carried out at the Ottawa and the Vancouver laboratories. Since the establishment of a semi-commercial dry-kiln in Vancouver, courses in kiln-drying have been conducted which have been well attended by representatives from coast mills. A study of the 'sinkage' of logs during 'driving' from the woods to the mills has been inaugurated in co-operation with the Canadian Pulp and Paper Association in an effort to curtail serious losses on this account.

Standard tests of small clear specimens of Canadian timbers, and tests of the nail-holding powers of Canadian woods have been advanced in both the eastern and Vancouver laboratories. The testing of wooden boxes and small containers, with the improvement of design and consequent curtailment of heavy transportation losses as its aim, is being carried out by means of a modern hazard machine. In the Vancouver laboratory a comprehensive investigation was made of the effect of fire-killing on the strength of cedar of pole size. This study was enlarged to include cedar poles infested with borers.

Studies in the pathology of timber include the rots of white cedar telephone poles, tests on the toxicity to fungi of certain water-insoluble substances, and the development of red stain in jack pine ties under service conditions. In addition to these, progress has been made in assembling a reference collection of representative wood-rots. Considerable work was done in the Vancouver laboratory on the study of the deterioration of cottonwood logs in fresh-water storage for different periods.

The work of the pulp and paper division in Montreal was by circumstances already mentioned limited chiefly to problems of a fundamental character. These fell into two main classes, namely, (1) the chemical and physical properties of the 'cooking liquor' used in the sulphite process of pulp manufacture, and (2) the chemical composition and properties of the individual constituents of the wood, particularly of lignin.

Exhibits were prepared in co-operation with the Canadian Forestry Association for the Vancouver exhibition. A more comprehensive exhibit was also arranged by the laboratory for the provincial exhibition at New Westminster. This latter work was done in co-operation with the New Westminster Lumbermen's Educational Class and the Dominion Crown Timber office. Arrangements were made for the Ottawa laboratory to put a permanent exhibit in the National Museum in Ottawa.

Appreciation of the services of the laboratories to the timber industries was manifested by the increase in the number of technical inquiries made to the laboratories. In some departments these exceeded requests of the previous year by over 25 per cent.

Forest Research Work

Research work at the Petawawa experiment station (Ontario) was very largely confined to the remeasurement of many of the eighty permanent sample plots established there from time to time since 1918. The results show remarkably good rate of growth, in some cases as much as a cord and a half per acre per year being produced. They also show the value of careful thinning.

In New Brunswick a survey to determine the rate of growth of pulpwood species on cut-over lands was conducted on the Miramichi watershed. A series of permanent sample plots was established in connection with this survey. Measurements were taken for the study of form of cedar from which it is hoped ultimately to prepare form-class volume tables.

Four members of the research staff having been withdrawn for urgent survey work in the West, the field activities of the research division were confined to the stations at Petawawa, Ontario, and in the province of New Brunswick. Compilation of data on permanent sample plots and preparation of reports of studies of rate of growth at the stations in New Brunswick and Quebec employed members of the research staff during the winter months.

Research work was also undertaken in the several inspectorates. Considerable attention was given to work in mensuration, particularly the development of a volume table for white spruce, and to the application of Cajander's classification of forest types to Canadian conditions.

Experimental work in thinning of jack pine was conducted in Manitoba and Saskatchewan, and, on a larger scale, in the Cypress Hills national forest, in the Alberta inspectorate. In the case last mentioned, it has been found that increased growth of the trees in thinned stands was quite noticeable at the end of three or four years. In British Columbia experimental work was done in seeding and planting, particularly in the broadcast sowing of western cedar.

Publications

In the early part of the year, work on Bulletin No. 78, "Some Commercial Softwoods of British Columbia," was completed, and the distribution commenced. Bulletin No. 79, "Taper as a Factor in the Measurement of Standing Timber," and a revised edition (the 8th) of Bulletin No. 1, "Tree Planting on the Prairies," were brought out. An additional tree pamphlet (No. 13), "Western Yellow Pine," was published in English. French versions of Tree Pamphlets Nos. 7 to 13 (inclusive), were also printed. Two new circulars, both dealing with the work of the Forest Products Laboratories, were published. These were Nos. 21, "Tests of Green-cut Western Cedar Poles," and 22, "Report on Tests of the Relative Strength of Green-cut and Fire-killed Western Cedar Pole Timbers."

Probably the most important publication of the year was the report of the 1923 British Empire Forestry Conference, of which the Forest Service assumed the publication. This makes a large volume of over four hundred pages, giving in full the proceedings of the Conference.

Publicity

The annual Forest Week Campaign opened this year (1927) on April 24, and lasted until April 30 (inclusive). The 1927 campaign marked the closest co-operation and co-ordination yet achieved with the United States authorities in their equivalent campaign. The campaign resulted in a greater number of newspaper articles than ever before, with a greatly increased average length. A new feature in forest-protection literature was a children's playlet entitled "Betty in Dreamland," written and donated to the cause by an Ottawa lady.

A corps of lecturers was again maintained for the purpose of visiting boys' and girls' vacation camps; three lecturers visited 29 camps and established contact with 2,267 campers, an increase of five camps and 688 campers.

As in previous years a representative of this service supervised the forestry displays at the Western exhibitions and took personal charge of this work at all "Class A" fairs. Two "Class A" fairs were added to the usual quota—Brandon and New Westminster—making, along with Calgary, Edmonton, Regina, and Saskatoon, six major points at which exhibits were made; and exhibits were also placed at seven minor fairs throughout the four western provinces. A fine log cabin was built on the Edmonton fair grounds for publicity purposes.

It has been found that the log cabins built on the Calgary and Edmonton exhibition grounds to house Forest Service exhibits are a great attraction, and it has been decided, in consequence, to place similar buildings on the Saskatoon and Brandon grounds for the 1928 fair season.

Some of the outside offices of this service have also given considerable attention to publicity work affecting their particular spheres of action. Particular attention has been given to publicity at various exhibitions, and to radio talks, articles in the press, and addresses at gatherings of different natures, including a course of lectures at one of the Manitoba normal schools and another at a short course for farm boys and girls.

Revenue

In comparison with the fiscal year ending March 31, 1927, the revenue from all sources for this fiscal year shows a net increase.

There were 37 more timber sales with an increase of $11,746.81, due to an increase in the sales of pulpwood in Saskatchewan and a general increase in the demand for timber sales throughout the Prairie Provinces and especially in British Columbia. There was an increase of $1,253.60 from tree seed and $6,108.82 in miscellaneous revenue. Timber permits showed a small increase of over $200.

There were, however, 163 fewer grazing permits, with a decrease in revenue of over $600, which was apparently due to a very favourable growing season, giving sufficient fodder on lands outside the national forests. Decreases of over $400 from hay permits, $1,300 from surface rentals, and $2,000 from special use permits were also shown, but the decreases were more than offset by the increases above shown, the net increase amounting to $9,158.37 over the previous fiscal year.

In connection with the statement of Revenue, under the heading "Timber Permits," the kinds and total quantities of timber authorized to be cut from all reserves were as follows:—

Fuel-wood (cords)	30,025
Fence-posts, rails and piling (number)	296,977
Fence-posts, rails and piling (lin. ft.)	1,630
Telephone poles (lin. ft.)	1,075
Railway ties (number)	6,310
Saw-timber (feet board measure)	6,410,231
Mining timber (lin. ft.)	2,432,658
Mining timber (cords)	Nil.
Mining timber (ties)	924
Building logs (number)	28,921
Building logs (lin. ft.)	380,818
Miscellaneous (lin. ft.)	653
Miscellaneous (cords)	399
Miscellaneous (number)	21
Miscellaneous (cords of pulpwood)	4,683

The quantity of saw-timber given above is, of course, quite distinct from that cut under Timber Sales as given in the Statement of Revenue which follows:—

STATEMENT OF REVENUE, FOREST SERVICE. FISCAL YEAR 1927-1928

National Forest	Number of timber sales operating	Revenue from timber sales	Number of timber permits	Revenue from timber permits, etc.	Number of grazing permits	Revenue from grazing permits, etc.	Other Sources of Revenue					Total revenue all sources
							Hay permits and seizures	Surface rentals	Special uses	Tree seed	Miscellaneous including fishing*	
Manitoba—		$ cts.		$ cts.		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Duck Mountain	1	72 60	456	3,271 01	29	233 10	275 50	606 15	71 00	.....	64 19	4,593 55
Porcupine No. 1	5	2,408 95	102	3,176 91	1	16 00	19 25	.....	12 00	.....	133 00	5,766 11
Riding Mountain	6	1,422 15	1,389	12,192 02	24	188 15	548 75	1,336 78	109 00	.....	128 85	15,925 70
Sandilands	2	453 75	27	207 00	.....	.....	.....	.....	.....	.....	.....	660 75
Spruce Woods	.....	.....	14	60 75	.....	.....	28 25	.....	.....	.....	.....	89 00
Turtle Mountain	.....	.....	48	222 65	34	276 10	94 25	58 83	7 00	.....	133 00	791 83
Total	**14**	**4,357 45**	**2,036**	**19,130 34**	**88**	**713 35**	**966 00**	**2,001 76**	**199 00**	.....	**459 04**	**27,826 94**
Saskatchewan—												
Beaver Hills	.....	.....	93	353 15	21	175 68	338 75	.....	4 00	.....	.....	871 58
Big River	5	2,121 19	65	1,216 81	3	57 48	304 25	.....	10 00	.....	231 27	3,941 00
Dundurn	.....	.....	35	123 00	6	180 30	36 00	.....	7 00	.....	.....	346 30
Elbow	.....	.....	100	275 75	174	1,098 64	14 25	6 00	136 00	.....	.....	1,530 64
Fort à la Corne	8	1,108 20	347	2,511 26	1	2 44	29 25	53 00	20 00	.....	60 06	3,784 21
Keppel	.....	.....	8	19 00	73	503 91	.....	.....	7 00	.....	3 00	532 91
Manito	.....	.....	32	93 25	108	1,643 51	25 25	83 91	28 00	.....	.....	1,873 92
Moose Mountain	.....	.....	284	1,336 74	50	457 38	144 60	217 27	19 00	.....	857 00	3,031 99
Nisbet-Pines	2	384 05	343	3,026 79	19	279 17	105 50	2 00	20 00	.....	3 30	3,820 81
Pasquia	39	60,928 59	103	6,288 75	1	5 32	198 25	5 00	49 00	.....	326 50	67,801 41
Porcupine No. 2	8	2,192 98	280	2,402 48	6	77 56	343 15	108 00	68 00	.....	.....	5,192 17
Seward	.....	.....	.....	.....	29	724 02	40 00	.....	28 00	.....	.....	792 02
Sturgeon	2	175 17	10	72 60	2	13 85	15 50	40 15	6 00	.....	18 50	341 77
Total	**64**	**66,910 18**	**1,700**	**17,719 58**	**493**	**5,219 26**	**1,594 75**	**515 33**	**402 00**	.....	**1,499 63**	**93,860 73**
Alberta—												
Athabaska	1	50 00	2	12 00	14	111 65	8 00	.....	25 00	.....	163 75	370 40
Bow River	1	201 00	49	218 15	48	2,413 34	29 50	.....	36 25	.....	12 50	2,910 74
Brazeau	10	12,822 96	42	3,544 35	84	324 76	2 00	777 40	25 00	.....	686 06	18,182 53
Clearwater	5	3,845 47	28	505 04	72	414 92	7 25	865 08	22 79	.....	232 50	5,893 05
Cooking Lake	.....	.....	1	2 00	52	387 28	145 00	.....	3 00	.....	120 00	657 28
Crowsnest	6	1,008 44	85	3,838 89	175	5,392 96	3 00	305 03	208 75	.....	174 75	10,931 82
Cypress Hills	.....	.....	296	1,482 57	156	3,106 66	.....	146 05	87 74	.....	194 50	5,017 52
Lesser Slave	6	12,991 08	.....	.....	1	21 10	23 00	.....	7 00	.....	150 25	13,192 43
Total	**29**	**30,918 95**	**503**	**9,603 00**	**602**	**12,172 67**	**217 75**	**2,093 56**	**415 53**	.....	**1,734 31**	**57,155 77**
British Columbia—												
British Columbia Reserves	50	8·025 29	20	223 67	36	676 37	45 50	293 00	187 58	13,306 00	1,551 04	24,308 45
Indian Head Nursery	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,231 86	5,231 86
Forest Products Laboratories	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	475 04	475 04
Sundries	.....	.....	.....	.....	1	40 00	.....	.....	.....	.....	402 29	442 29
Grand total	**157**	**110,211 87**	**4,259**	**46,676 59**	**1,220**	**18,821 65**	**2,824 00**	**4,903 65**	**1,204 11**	**13,306 00**	**11,353 21**	**209,301 08**

*Miscellaneous, $9,754.36, Fishing, $1,598.85.

III

NATIONAL PARKS OF CANADA

REPORT OF THE COMMISSIONER, J. B. HARKIN

National Parks

General

The past year was one of the most satisfactory from every point of view yet experienced in connection with the National Parks of Canada. The season itself was a favourable one with frequent rainfalls which obviated practically all danger of forest fires and relieved those in charge from the heavy anxiety of the two previous years. The weather, moreover, was seldom continuously wet so that tourist traffic was not interfered with, and the absence of dust and smoke added to the pleasure of travel and tended to increase the number of visitors. The total registrations to all parks was approximately 359,582. Of those registered, 268,362 came by motor, and 91,220 by other means of transportation.

The largest traffic was to the three-park unit comprising Rocky Mountains, Yoho, and Kootenay parks. These three reservations adjoin each other along part of their boundaries and are linked together by the loop motor highway now circling the Central Rockies. Consequently it is more convenient to treat them as one unit in compiling motor traffic figures. There are three entrances to the unit: the Leanchoil gateway at the western boundary of Yoho park; the Sinclair Radium Hot Springs gateway, at the western entrance to Kootenay park; and the Kananaskis gateway, at the eastern entrance to Rocky Mountains park. Rocky Mountains park has no gateway on the west while Kootenay and Yoho parks have none on the east, so that the aggregate traffic to the three parks can be compiled only by totalling the motors entering through each of the above gates. Traffic was heaviest at the Kananaskis or eastern gateway, as the following table shows:—

Kananaskis Gateway, Rocky Mountains park—			
Canadian cars entering	25,800	Passengers	91,450
United States cars entering	1,535	Passengers	4,222
	27,335		95,672
Radium Hot Springs Gateway, Kootenay park—			
Canadian cars entering	6,234	Passengers	18,976
United States cars entering	2,206	Passengers	7,175
	8,440		26,151
Leanchoil Gateway, Yoho park—			
Canadian cars entering	1,417	Passengers	4,750
United States cars entering	227	Passengers	663
	1,644		5,413
Total Canadian cars	33,451	Total Canadian passengers	115,176
Total United States cars	3,968	Total United States passengers	12,060
Total cars entering	37,419	Total passengers	127,236

A large percentage of these cars undoubtedly visited all three of the connected parks, and all 'through' travellers must have traversed two, but in the absence of any means of arriving at complete figures the original entries alone have been given. As it is, however, these figures represent more than one-third of the total travel to all the parks, and serve to emphasize the importance of high class motor highways as a factor in modern travel for pleasure.

Waterton Lakes park, in southern Alberta, attracted 15,547 motor tourists, while Buffalo and Elk Island parks had 12,679 and 16,138 visitors respectively. Over 45,000 persons visited Point Pelee park in southern Ontario; 15,000 went to Fort Anne national park, Nova Scotia; 8,032 to Vidal Point, a recreational area in Saskatchewan; and 500 to the new Prince Albert park in the same province. Jasper park, which is accessible as yet only by railway, had approximately 12,000 visitors; Mount Revelstoke park, accessible by both rail and motor, 8,000.

It is especially gratifying to note the large percentage of Canadians among parks' visitors. Foreign visitors have in the past frequently remarked that it sometimes seemed to them that the people of Canada did not realize the outstanding character of their own great possessions. If this were ever true it can be said with truth no longer. The coming of the motor and the building of motor highways have completely changed travel conditions with respect to the national parks and in a new sense it may be said that Canadians are taking possession of their own country. Motor registrations to the five mountain parks accessible by highway show that over 87 per cent of cars were Canadian and about 13 per cent from other countries. Long distance travel by rail, on the other hand, appears still to show a majority drawn from outside countries. In Jasper park, where the railway still provides the only means of access, travel showed 42 per cent Canadians, 52 per cent United States citizens, and 6 per cent from other countries.

The completion of the Kicking Horse Trail from Lake Louise, Alta., to Golden, B.C., was one of the outstanding events of the year. It opened a new route across the Rockies and created a loop highway within the mountains of nearly 300 miles. The first section of this road—from Lake Louise to Field—was opened last year. Work on the second section—from Field to Golden—was prosecuted with vigour during the fall of 1926 and the spring of 1927 and by July 1 the road was ready for traffic. The official opening was held on July 9, the ceremony taking place on a high hill above the town of Golden in the presence of a number of distinguished representatives of the federal and provincial Governments and of local organizations. Hon. Charles Stewart, Minister of the Interior, and Hon. Dr. J. H. King, Minister of Public Health, officiated. From the date of the opening of this highway to the closing of the season over 5,600 cars went over the road in both directions and its thrilling character, particularly the traverse of the Kicking Horse pass, the descent of the west slope, and the provincial section via the tremendous Kicking Horse canyon aroused enthusiastic comments.

The new highway will form a link in the projected trans-Canada motor highway and for the completion of the Western Section only one link—between Golden, B.C., and Revelstoke, B.C.—requires to be constructed. The demand that this final gap should be bridged as speedily as possible has naturally been great and during the past year investigations were made looking to this end. Two possible routes were available, the first crossing the Selkirk range by Rogers pass, the second by way of the Big Bend of the Columbia river. The former route was considerably shorter but it presented serious disadvantages. Owing to the shortness of the season due to the heavy snowfall in the Selkirk range—in some years this is over 50 feet—it is usually late in the summer before the high passes are clear of snow. The route about the Big Bend on the other

hand has a milder climate and can be kept open for from six weeks to two months longer each year. Another very important consideration was the character of the Rogers Pass district in Glacier park. As is well known this is one of the worst sections of the Rockies so far as snow slides are concerned, so much so that the Canadian Pacific Railway was finally driven to build, at enormous expense, the Connaught tunnel, five miles in length. Moreover, approximately only six miles of the Glacier route can be said to possess scenic attractions of the first order and these slide conditions unfortunately occur where the scenery is at its best.

The Big Bend route on the other hand follows the Columbia river and passes through one of the most historic regions of the west. It is a low-level route, permitting a steady down grade from Golden (2,500 feet), to Revelstoke (1,496 feet). The Glacier route would involve a climb to Rogers pass (4,361 feet) of nearly 3,000 feet on the west and 2,000 on the east. Another argument in favour of the second route was that from Boat Encampment, at the elbow of the Big Bend, a motor highway could be constructed without much difficulty into Jasper park, thus establishing a second trans-Canada route. In view of these considerations, after carefully weighing both schemes, the department decided to lend its support to the second, or Big Bend route.

New Park Established.—An important addition was made during the year to the Dominion's already fine system of national reservations by the setting aside of an extensive area in northern Saskatchewan. North of the great fertile belt devoted to agriculture there lies in this province a region of rocks, woods and water which seems almost to have been formed by nature as a special playground for man. Here are found thousands of crystal lakes, from tiny rock basins only a few hundreds of yards across to great bodies of fresh water over 50 miles long. Between, tying one to another into an intricate network of waterways, run innumerable little rivers and streams offering to canoeists and lovers of the wilderness water routes extending for hundreds of miles. The white birch, the jack pine, and the white spruce grow here in unusual beauty and size and clothe the shores with their diverse greens. Scores of white sand beaches, shelving out gently and clean as a floor, invite one to linger and bathe. Pickerel, pike, and gray trout are found in abundance in the lakes and streams, while moose, deer, bear, and many species of game birds abound.

A generous and typical example of this interesting region has been set aside in Prince Albert park. The area covers approximately thirty townships and includes 1,377 square miles. The reserve is less than 600 miles distant from Winnipeg by motor highway and 500 miles from the international border. Its southern boundary lies about 33 miles north by west of the city of Prince Albert and is at present accessible by a secondary highway. A similar road gives access to lake Waskesiu, the most southerly of the large lakes found in the park. The western boundary is formed in part by the Sturgeon river; the eastern by the 3rd meridian as far as the 54th parallel, where the line turns easterly so as to touch but not include the waters of Montreal lake. Within the park lie three important bodies of water—Waskesiu lake, Kingsmere lake and Crean lake—as well as some forty or fifty smaller lakes. These large lakes in the northern part of the park are so closely connected by waterways that, with only a few short portages, a continuous trip can be made by water visiting them all, affording a circular canoe route of approximately 100 miles.

But aside from its own immediate attractions the park makes another appeal, irresistible to the adventurous. For its lakes and streams form a natural gateway to the great system of linked waterways which lead to the hinterland of Canada, extending like the links of a chain for many hundred

miles. On the northwest these waterways finally reach the Arctic ocean, whereas those on the northeast extend to Hudson bay. Innumerable possibilities for travel are, therefore, open to the canoeist and in addition to the numerous canoe expeditions afforded within its own boundaries it seems likely that the park will become a popular outfitting and starting point for journeys to these remote regions.

The Order in Council setting aside the park was passed on March 26, 1927, and the department immediately took steps looking towards its development. Major J. A. Wood, who had been assistant to the Superintendent of Rocky Mountains national park, was placed in charge of the new park and a staff of wardens appointed. As there were few data in connection with this region the first step was the securing of definite information regarding it. The principal lakes and waterways were explored and an examination of the park and surrounding territory was made by the Commissioner of National Parks and the Acting Superintendent. Surveys were later begun for the relocation of certain sections of the road from the southern park boundary to lake Waskesiu and plans made for the improvement of other sections. A site for a public camp ground was cleared fronting the big beach on Waskesiu lake; trails were cleaned out; cabins for the warden staff improved or rebuilt; and an up-to-date fire-fighting equipment installed. It is expected that the park will be formally opened to the public in August, 1928.

Extension to Jasper Park.—By an Order in Council dated April 7, 1927, an important addition was made to Jasper park, by the extension of its boundaries to the south so as to include the great alpine region extending along the Great Divide from the Columbia ice-field to the northern limits of Rocky Mountains park. The area involved covers 980 square miles, bringing the total extent of Jasper park up to 5,380 square miles. This region represents the climax of the snow and ice deposits of the Rockies and is one of the most outstanding from the point of view of alpine features on the continent, containing five great ice-fields and innumerable snow-capped peaks and glaciers. By the creation of this new reservation, national park conditions are now established along the eastern slope of the main Rockies for a distance of 225 miles.

In view of this considerable addition the possible revision of the existing boundaries of the Rocky Mountains and Jasper parks has been under consideration. In the more easterly sections of both parks, approaching the outer ranges, there are regions less outstanding from the scenic point of view, and this has suggested the possibility of reducing or readjusting boundary lines. Last summer, the Minister of the Interior accordingly arranged that Mr. R. W. Cautley, D.L.S., of the Topographical Survey undertake a survey of these sections of the park. His report is now receiving the consideration of the department.

This widespread interest in national parks reveals the awakening of a new consciousness, the development of a national pride in the beauty of country, and a recognition of the value of these great public reservations. There is no doubt that the remarkable growth of tourist travel in recent years, due to the coming of the motor, has given national parks a new economic value which has helped to establish their importance even in the eyes of the most practical. The increasing noise and strain of city life, and the rush of traffic along all the highways of the country have given a heightened value to regions of solitude and peace. These conditions are likely to increase rather than to diminish and Canada may look forward in the next half century to increasing travel by highway to every part of the continent, and in the no distant future, by air. In the past difficulty of access has preserved many regions in their primeval simplicity. It is clear that the time is coming when this will no longer be true

when even the remote Arctic may become a playground. The value of great wilderness reservations, therefore, such as are found in the national parks must become even greater and the importance of setting them aside while there is yet time is clearly seen. But, as becomes increasingly clear to those charged with their administration, the mere setting aside of such reservations is not enough. A constant vigilance will be required to preserve their wilderness and unspoiled character, to develop a policy which will permit of the freest use but which will jealously guard what is, perhaps, their richest endowment. The time has gone by when such a movement can be considered sentimental or condemned as impractical. We are coming to see that whatever makes for general human welfare is practical in the last and best sense, and in the end is economically sound. "There is nothing," said the late Theodore Roosevelt, "more practical in the end than the preservation of beauty—than the preservation of anything that appeals to the higher emotions of mankind". If we were to think of national parks merely from the economic standpoint, from the point of view of their ability to continue to attract tourist travel, the above dictum would undoubtedly be sound. When we think of the parks in their larger values, as a means for the enlargement and betterment of life, and for the satisfaction of deeply based instincts of mankind, it becomes incontrovertible.

Distinguished Visitors.—The growing reputation of the national parks of Canada abroad is reflected in the number of distinguished names among the visitors' list. Practically every important personage or party of notables which crosses Canada now arranges to visit the national parks and usually to stay over for a few days' rest and relaxation. Among such guests last year were Their Royal Highnesses the Prince of Wales and Prince George, who with Premier and Mrs. Baldwin and the other members of the Royal party spent several days informally at Banff and Lake Louise. Earlier in the year Banff was honoured by a visit from Their Excellencies Lord and Lady Willingdon, who spent a few days there on their first trip to the West. In the autumn Their Excellencies returned for a couple of weeks' holidaying in Jasper park, and with their party enjoyed fishing, golf, and motoring.

The number of private parties, many of which travelled in special trains, was also unusually large and included a special party of delegates to the Pan-Pacific Relations Congress at Honolulu, among whom were Sir Frederick Whyte, Viscount Castlereagh, Mr. Lionel Curtis, famous founder of the Round Table, Mr. Malcolm MacDonald, the Hon. William Astor—the son of Lord and Lady Astor—the Hon. Hugh Wyndham, Sir Arthur and Lady Currie, and a number of other prominent citizens of the Empire. Other visitors were the party of British Press Representatives numbering about 120, a party of delegates from the World's Poultry Congress comprising over 100, and 300 delegates to the Triennial Congress on Mining and Metallurgy. Special parties from the United States included 400 members of the Investment Bankers' Association, travelling in four special trains; the New Outlook Magazine party numbering 200; and delegates to the Convention of Real Estate Men, who toured in two special trains. Several large special parties came also from Ontario and Quebec, including one of about 150 visitors who travelled under the auspices of Laval University, Montreal.

WILD LIFE IN THE PARKS

The success of the national parks of this continent as game sanctuaries has been firmly established during the past ten years. Their usefulness in this respect is now widely recognized not only at home but abroad and many countries are supporting the creation of similar national parks as the best means for the conservation of wild life. The new national park in the Dominion of South Africa, Kruger park, follows closely the lines of the Canadian parks, that is, the combination of a game reserve with a scenic reserve.

The Right Honourable the Earl of Onslow, President of the Society for the Preservation of the Fauna of the Empire, in his presidential address at the last general meeting of the society said:—

> The whole world is becoming so speedily opened up to travellers, traders, tourists and settlers and so much uncultivated land is coming under the plough that unless some more or less drastic measures are taken to preserve the distinctive fauna it must obviously disappear entirely. . . . I am sure I should be only quoting what big game sportsmen themselves would say when I suggest that national parks are the very best sanctuaries for big game. . . . I believe that is the only way in which you can be perfectly certain they will continue to breed and multiply and so to carry on. Most of the countries have taken steps in this direction. In fact, in those countries where it has been done for some time the fact of the establishment of these parks has obtained the general approval of the people so that it is really a method of the preservation of animals which can be considered as thoroughly satisfactory. It is a policy that among other things is financially sound.

While no complete census of the big game now in the mountain parks can be arrived at, a steady growth in many species from year to year is apparent to even the casual observer. Sheep and goat are extending their ranges in many places and larger herds are continually seen. Black bear are also increasingly numerous and grizzly are reported more frequently in the remoter areas. Elk, which were introduced into both Rocky Mountains and Jasper parks, are noticeably spreading out in both reserves. Young elk seem to be in particularly good condition. Moose are reported increasing in Waterton Lakes, Kootenay, Banff and Jasper parks. Caribou are found only in Jasper park. A small band of these interesting animals came into the Tonquin valley some years ago from British Columbia. This herd has very considerably increased its numbers and in the past few years other herds have come in along the northern boundary and are also apparently making that region their habitat.

During the year a request was received from the province of British Columbia for Rocky Mountain sheep for restocking. In view of the satisfactory condition of the park herds the department decided to donate fifty sheep from the Rocky Mountains park for this purpose. The animals were captured by the park wardens and successfully shipped without loss.

Government Buffalo Herd.—The condition of the Government buffalo herd in the Buffalo national park, Wainwright, is very satisfacory. Thinning by means of annual shipments to the north and the slaughter of an additional number for sale has reduced the herd to numbers which the park is well able to support. The animals are now in prime condition and show a large percentage of young and vigorous stock. In the autumn a contract was made with a Calgary packing company for the slaughter of 1,000 animals, and from the meat and the hides a satisfactory revenue was obtained.

Three superb buffalo robes, mounted as floor rugs, from the Government herd at Wainwright park, were presented by the department to Their Royal Highnesses the Prince of Wales and Prince George, and to Premier Baldwin, as souvenirs of their Canadian trip. The gifts were accompanied by a small brochure bound in buffalo leather, with hand coloured illustrations of Indian designs, relating the story of the growth of the herd and Canada's success in the restoration of this interesting native species.

Antelope Herd.—The Government antelope herd in the Antelope reserve, Nemiskam, Alta., which had reached the gratifying number of 450 since the creation of the park in 1915, suffered a severe loss during the winter. On December 27 last during a blizzard the antelope drifted against the fence, apparently bunching together so that their weight broke through the centre wires of the 8-foot fence and all but nineteen of the animals drifted away during the storm. Every effort was made to recover them during the winter but as the weather in the succeding months was unusually mild, food was plentiful

and only about 152 were secured. Fortunately 110 of these were does. The antelope is one of the most difficult native animals to drive or capture but it is hoped that next winter, when food again becomes scarce, a number of those which escaped will return to the park of their own accord in quest of food.

Fish.—Through the valuable assistance and co-operation of the Department of Marine and Fisheries, the restocking of lakes and streams in the parks, was again carried on. The above department has now two hatcheries in Rocky Mountains park, the main hatchery at Banff and the subsidiary one at the Spray lakes.

Early in the season about forty lakes and streams in Rocky Mountains park were stocked with cut-throat trout fry, 747,000 fry being liberated. Brown trout fry were also placed in the waters of Waterton Lakes park and in the Bow river. In July 71,840 eyed cut-throat eggs were buried in Marvel lake, Spray river and Leman lake and in August 205,800 cut-throat fry were liberated in these waters and in the Spray lakes and Bryant creek. Lake O'Hara was also stocked with 12,000 cut-throat fry.

In Waterton Lakes park the usual shipments of fry were received through the kindness of officials in Glacier national park, Montana, and 13,000 were placed in the Waterton lakes and tributary streams. The difficulty of transplanting fry from Banff to Waterton Lakes park made it seem desirable that a small hatchery should be established in the latter park. By an agreement therefore between this department and the Department of Marine and Fisheries a small hatchery was erected at the Waterton townsite.

In Jasper park, under the direction of the Biological Board of Canada and following out the recommendations submitted by them as a result of their two years' investigation of some of the principal waters of the park, small aquatic plants for fish food were placed in sheltered, shallow bays in lakes Mildred, Annette, Edith, and Beauvert. Under the supervision of Mr. J. E. Martin, Superintendent of the Banff hatcheries, 15,000 brown trout fry were placed in lake Mildred, 10,000 in lake Edith, 10,000 in lake Annette, and 5,000 in Big Trefoil lake. To give the fish a chance to develop it was decided to close these lakes for two years.

The restocking of Maligne and Medicine lakes and the connecting section of Maligne river had also been strongly recommended by the Board, and appeared very desirable both as a biological experiment, since this unit is now barren of fish life, and on account of the increasing importance of these lakes as tourist attractions. The difficulty of transporting fry the long distance from Banff—the nearest fish hatchery—to Jasper and then to Maligne lake presented a formidable obstacle and the fishery experts agreed that a small hatchery at Jasper would be essential before the work could be undertaken. In December last the Dominion Inspector of Fisheries for Alberta visited Jasper park and went over the ground with the superintendent and decided to convert an unused construction cabin into a temporary hatchery. A water service was laid to the building and ten troughs installed. Later 250,000 eggs of speckled trout were shipped to Jasper and cared for by park officials during the remainder of the year. In June next these will be transported to Medicine and Maligne lakes and liberated there. The outcome of this experiment will be watched with much interest both by the fishery experts and the National Parks of Canada.

HIGHWAY CONSTRUCTION IN PARKS

Highway construction during the year included a stretch of three and a half miles on the highway from Jasper along the Athabaska valley to the eastern boundary of the park. This road will form a section of the projected Jasper highway from Edmonton. The distance now completed in the park is thirty-four miles.

A final section about a mile in length was constructed on the Mount Revelstoke highway, completing the road from the park entrance to the summit of the mountain according to the original plan. On August 17 the road was opened by His Royal Highness the Prince of Wales, who stayed over at Revelstoke during his brief trip across Canada for the event.

In Waterton Lakes park surfacing work was done on the Akamina highway and the road finally completed from park headquarters to the summit of the Akamina pass. In Elk Island park work was begun on the construction of a road from the north gate to Sandy Beach and from Sandy Beach to the south end of the lake and thence to headquarters. In Yoho park two miles of new road were constructed between Field and the Natural Bridge and the remaining mile widened and improved to meet the demands consequent upon the opening of this park to motor travel. On the Banff-Windermere highway widening and improvements were carried out at various points and the road generally brought up to a condition where it is comfortably wide and safe throughout.

In Jasper park a further experiment was made with the use of tar sands from the McMurray region and a stretch of 2·13 miles was surfaced. This section was completed by the middle of August and its condition during the rest of the season was very satisfactory. The total area surfaced amounted to 20,771 square yards and the cost of the work to about $1.26 per square yard. The material gives an even and dustless surface and a very great point in its favour is that during the wet weather there is no tendency for cars to skid. As in the previous year the Department of Mines supervised the operations at the quarry at McMurray, looked after the transportation of material and operated a heating and mixing plant for the manipulation of the sand. The heating and mixing of the sand for road surfacing presented no difficulty although the plant constructed and operated at Jasper represented a radical departure from the generally accepted methods. Its outstanding features were the low cost of construction, simplicity of operation, and low operating costs.

Particular interest attaches to this stretch of road since it represents the first experiment in the commercial utilization of these Canadian bituminous sands. The behaviour of this pavement and the success of several small test pieces put down in the city of Edmonton in 1915 now make it clear that these bituminous sands can be used for the construction of the highest class of asphalt wearing surfaces. They indicate that the bituminous sands of the McMurray region constitute one of the great natural resources of Canada, and a gratifying result of the investigation is that it renders available data which would enable capital to undertake the development of these sands with the minimum of preliminary expense and delay.

The following table gives the present mileage of roads, trails and telephone lines maintained in western parks:—

Park	Number of miles		
	Roads	Trails	Telephone lines
Kootenay	63	78·0	64·0
Revelstoke	18	26·5	17·25
Rocky Mountains	145	747·0	179·5
Jasper	84	623·75	304·50
Yoho	55	154·0	40·50
Glacier	9	113·0	7·0
Buffalo	11	34·50	.....
Elk Island	6	.....	.....
Waterton Lakes	34	162·75	56·50
Totals	425	1,939·50	669·25

New Motor Campsite, Banff.—The reacquisition by the Canadian Pacific Railway Company of the Banff golf course and the plans for its enlargement and reconstruction involved the taking over of the Mount Rundle motor campsite, at the junction of the Bow and Spray rivers. Several sites for a new camp were proposed but after consideration of their various advantages a location on Tunnel mountain was decided upon, which combined fine views, good air, freedom from mosquitoes, ample shade and superior natural hygienic conditions. A plan for the area was prepared, the necessary clearing was undertaken and the site laid out in lots. A water supply, electric light, shelters, community stoves, washrooms and other conveniences necessary to an up-to-date camp will be provided as soon as conditions permit in the spring.

FIRE PROTECTION

Owing to the favourable season there was practically no loss from forest fires. A few outbreaks were reported but they were all small and were easily got under control. Each year new equipment is added to the fire-fighting service and at the present time all the parks are reasonably well equipped from this point of view. There are now 66 portable pumpers, 31 light pumpers, 4 railway speeders, and 4 railway velocipedes in use in the different parks.

TRAIL RIDERS OF THE CANADIAN ROCKIES

The Trail Riders of the Canadian Rockies held their annual meet in Rocky Mountains park August 5-7. This organization which was started to encourage trail riding in the Rockies, now numbers over 800 members. Of these approximately 100 have qualified for the gold button signifying that they have ridden 2,500 miles or upwards in the mountains; 75 have ridden 1,000 miles or upwards; 125 have ridden over 500 miles, and approximately 350 over 100 miles.

The wide appeal of the organization is shown by the international character of its membership list, which includes many well-known artists, writers and travellers, not only from Canada but also from the United States and overseas. The annual ride, which usually follows trails unbeaten by the regular tourist, is helping to bring to notice some of the beautiful but lesser known parts of the parks and enabling many people to enjoy this most delightful of all ways of establishing an acquaintance with the peaks. The route selected for last year's ride was from Sundance canyon, near Banff, via Brewster and Allenby creeks and Assiniboine pass to the Assiniboine camp. From this point a new trail opened by the Marquis degli Albizzi and the Duke of Leutchenberg was followed to lake Magog and mount Assiniboine. Nearly sixty members took part. At the annual Pow-wow, held at Sunshine camp, the Lake of the Hanging Glaciers, B.C., was selected as the objective for next year's ride. Return was made by the Valley of the Rocks, the historic Simpson pass—first travelled by Sir George Simpson in 1841—and Healy creek.

RECREATIONS

Winter Carnivals.—The winter carnivals held at Banff and Revelstoke last season were both highly successful and attracted a larger number of visitors than ever before. This was due not only to the increasing interest which Canadians as a whole are taking in winter sports but also to the growing realization of the unique enjoyment and attractions offered by a winter holiday in the parks. Conditions at Banff for a good part of the winter are practically ideal. The absence of wind, the dry air and the abundant sunshine serve to tone the physical system and make outdoor exercise a delight. For people who become debilitated through indoor confinement or the smoke-darkened air of our large cities during the winter, an outdoor holiday in the Rockies would

afford great benefit. Canadians were somewhat late in recognizing the value of these great regions from the scenic point of view and they have perhaps as yet scarcely awakened to their usefulness from the health point of view. Dr. C. W. Saleeby, F.R.S.C., the well-known British scientist, decared that it seemed to him that "the cold and sun of Canada, playing upon the well-fed, produce a splendour of physique, a low rate of disease, an abundant energy of mind, a *joie de vivre*, or national euphoria, which must rejoice every lover of mankind." Referring to Leysin in the Alpes Vaudoises, the site of a famous sanitorium for sunlight treatment, he says:—

> In or near such a spot as Banff, for instance, in the Canadian Rockies, all the advantages of Leysin and more could be reproduced on any scale. My own observations in Canada, and what I saw at Leysin, lead me to believe that we should find a friend in the clear, cold air. It stimulates. The nervous system, the muscles, the processes of metabolism respond to it. Light and cold seem to be the ideal combination. Perhaps the real merit of altitude resides not in the higher proportion of ultra-violet rays, but in the coolness of air combined with the light.

Indian Days.—The Indian Day celebrations at Banff were carried out most successfully last year and attracted greater attention than ever before. Several thousand attended the sports and witnessed the native games, competitions, and dances. The full dress procession, with the Indians on horseback in full regalia, which is now one of the most picturesque Indian displays that can be seen on the continent, was nearly a mile long and the beautifully decorated costumes and trappings, many of them handed down for generations, aroused the admiration of all spectators.

Highland Festival.—In September a Highland Festival was held at Banff for the first time, under the auspices of the Canadian Pacific Railway Company. It included a program of Scottish dances, games, and music in which a number of outstanding artists took part and drew competitors from many parts of the Dominion. The festival was so successful that it is understood it will be made an annual event in connection with the Banff Springs hotel.

Banff Golf Course.—In July last the Banff golf course was taken over by the Canadian Pacific Railway Company and plans were immediately made for a complete reconstruction of the course with a view to bringing it up to the standard of the best in America. Mr. Stanley Thompson, the architect of the Jasper links, was commissioned to prepare the new layout and submitted designs which called for practically a new course. Work was at once begun on the first nine holes and good progress made. The course will have three sets of tees, for the beginner, average and expert player respectively. Holes 1, 2, 3, 4, 5, 13, 14, 15, 16, 17 and 18 will be in full view of the windows and terraces of the Banff Springs hotel and each fairway will afford a delightful vista.

SUPERINTENDENTS' CONFERENCE

In January the first conference of park superintendents was called at Ottawa and attended by the superintendents and acting superintendents of all the western parks. The meetings took the form of a round table discussion on the principal phases of park administration and protection viewed from the standpoint of those actually engaged on the ground. The mutual exchange of views and experiences was very useful and should lead to a greater efficiency in the administration of the parks. At the conclusion a number of resolutions were drawn up relating to the handling of tourist affairs, training of wardens, protection of game, maintenance of roads and trails, handling of tourist travel, the administration of townsites, as well as a uniform control of the parks generally.

PUBLICITY

The value of adequate publicity as an indispensable adjunct to the development of the parks has been kept in mind and there has been built up a series of publications giving information concerning each of the main parks and its attractions. During the year two new booklets were prepared, one, *The Kicking Horse Trail,* descriptive of the new highway from Lake Louise to Golden, the other, *Prince Albert Park,* a descriptive guide to the new park in Saskatchewan. A revised edition of *The Banff-Windermere Highway* was also prepared and sent to press and the compilation of material for the forthcoming *Guide to Jasper Park* completed. In addition to these more comprehensive publications the need for small folders which will give information in a compact form to visitors has been much felt. A beginning was made this year by the preparation of a small guide covering the motor highways and principal attractions of Banff, Yoho, and Kootenay parks. A mileage card showing distances between the parks and provincial points was also compiled and printed. Total distribution of pamphlets numbered 144,259.

A number of new movie films of the different parks and of wild life were secured. These were prepared and titled by parks officers and were largely distributed. The public lecture work was continued by the Director of Publicity and the official lecturer. The total number of lectures given was 147, estimated attendance 40,360. Moving picture reels shown at Ottawa totalled 1,368; outside, 498. Reels loaned numbered 451. Several hundred negatives and slides were added to the photographic library. During the year 14,222 prints were distributed, 1,129 enlargements, and 525 transparencies. Lantern lectures loaned numbered 79. Material for 430 articles and lectures was also prepared and sent out to writers and speakers, and 389 engravings were loaned.

REVENUE

Revenue collected by the National Parks of Canada during the fiscal year ended March 31, 1928, exceeded by $36,633.46 the amount collected in 1926-27. The following statement shows the net increases and decreases from the different sources:—

Source	1927-28	1926-27	Increase	Decrease
	$ cts.	$ cts.	$ cts.	$ cts.
Rocky Mountains park	143,457 64	137,307 00	6,150 64	
Jasper park	32,808 22	20,368 20	12,440 02	
Buffalo park	80,121 56	64,045 50	16,076 06	
Antelope park	576 00	642 00	.....	66 00
Glacier park	143 16	170 25	.....	27 09
Waterton Lakes park	6,040 73	6,012 80	27 93	
Fort Anne park	11 25	15 00	.....	3 75
Yoho park	3,686 73	2,338 17	1,348 56	
Kootenay park	8,111 20	7,030 60	1,080 60	
Point Pelee park	89 00	491 82	.....	402 82
Brereton Lakes park	52 00	30 00	22 00	
Elk Island park	181 50	218 00	.....	36 50
Historic sites	30 00	34 25	.....	4 25
Fines and forfeitures	2,596 43	2,636 97	.....	40 54
Migratory birds	89 25	68 00	21 25	
Lake Florence sanctuary	55 00	40 15	14 85	
Miscellaneous	2 00	56 00	.....	54 00
Prince Albert park	38 50	.....	38 50	
Vidal Point park	48 00	.....	48 00	
Totals	278,138 17	241,504 71	37,268 41	634 95

Net increase ..... $ 36,633 46

The National Parks of Canada—Their Number and Area

Scenic Parks

Alberta—	
Jasper park	5,380 square miles
Rocky Mountains park	2,751 "
Waterton Lakes park	220 "
British Columbia—	
Glacier park	468 square miles
Kootenay park	587 "
Mount Revelstoke park	100 "
Yoho park	476 "
Saskatchewan—	
Prince Albert park	1,377 square miles
Vidal Point park	17·2 acres
Ontario—	
Point Pelee park	4 square miles
St. Lawrence Islands park	165 acres

Animal Reserves

Buffalo park, Wainwright, Alta	197·5 square miles
Elk Island park, Lamont, Alta	51·0 "
Nemiskam Antelope park, Nemiskam, Alta	8·5 "

Historic Parks

Fort Anne, Nova Scotia	31 acres
Fort Beauséjour, New Brunswick	59 "

Three additional areas—Waweskesy park and Minissawok park for the preservation of antelope, and Fort Howe park, St. John, N.B.—have also been set aside but have not yet been developed.

Detailed Reports of Parks

ROCKY MOUNTAINS PARK

Travel to Rocky Mountains park was the heaviest in the history of the park. Rail travel showed a considerable increase and motor traffic was 50 per cent greater than the previous year. The total number of visitors was 166,521, or an increase of 29,858 over the previous year.

No registrations are made of motorists entering Rocky Mountains park on the west. Registrations at the Kananaskis, or eastern gateway, however totalled 53,363 cars, eastbound and westbound, or an increase of 15,405 over the preceding year. The number of passengers carried was 95,672 or 26,890 greater than in 1927. Of these 91,450 were Canadians and 4,222 from the United States.

An idea of the growth of travel to this park is shown by the figures for the past five years:—

1923–24	94,930
1924–25	104,241
1925–26	124,749
1926–27	136,663
1927–28	166,521

In many cases monthly travel now exceeds the total yearly travel of a few years ago.

A new record for the number of cars using the Banff-Kananaskis highway in one day was established on July 3, when 1,533 cars passed through the Kananaskis gateway. A new record for week-end travel was established on July 1-3 with 3,731 cars. The previous week-end record was for May 22-24 with 1,937 cars.

The growth of travel has naturally been reflected in a larger use of all park facilities, which in some cases were placed under a heavy strain to meet the demands laid upon them.

This was particularly true of the two Government bath houses at the Hot

Sulphur springs. At the Cave and Basin springs a total of 66,233 bathers passed through the turnstiles while on more than one occasion 1,500 bathers were accommodated in one day. In the past nine years there has been a growth of approximately 85 per cent in the use of these springs. The number of bathers rose from 35,969 in 1919 to 66,233 in 1927. Records for bathers in one day show a rise from 945 in 1921 to 1,611 in 1927.

The number of bathers at the Upper Hot springs which are used more for therapeutic than recreational purposes, was also the largest recorded. Records show a growth of almost 100 per cent in the use of these springs in the past nine years.

The growth in motor travel involved also a much larger use of the public campsites, particularly of the Mount Rundle Camp at Banff. This camp was opened in 1923 and has shown a steady growth in use. In 1923 there were 1,828 cars carrying 7,469 people registered at the camp, and 1927 the numbers had increased to 6,017 cars with 21,620 people.

Museum, Zoo and Animal Paddocks.—A lively interest was manifested by tourists in the Banff Museum and its exhibits of native animals, plants and geological specimens. Over 30,000 persons signed the register as compared with 15,000 last year. No record is kept of the number of persons entering the zoo, but it is clear from the crowds who visit it that it is one of the major attractions of the park. The walks, lawns and cages were kept in good condition and elicited favourable comments from many visitors. The total number of animals now encaged is thirty-three as follows: 1 polar bear, 2 grizzly bears, 3 black bears, 1 cinnamon bear, 2 mountain lions, 1 bobcat, 4 timber wolves, 4 coyotes, 1 wolverine, 1 badger, 2 marten, 2 gophers, 1 marmot, 1 Canada lynx, 2 great horned owls, 1 peacock, 3 Canada geese, 1 golden eagle.

The animal paddocks, containing the exhibition herd of buffalo, elk, sheep, and goat, are a constant source of attraction. This year 89,841 persons visited these enclosures, as compared with 65,585 persons in 1926-27. The animals at present number: buffalo, 19; elk, 18; angora goats, 7; rocky mountain sheep, 5; rocky mountain goat, 1; horned sheep, 4; yak, 5.

Licences.—The growth in the general business of the park is well indicated by the variety and number of the licences issued. In the past year these totalled over 35,000, including 18,040 transient auto licences; 540 grazing; private auto, 515; motor cycle, 440; and park season auto, 298.

Fire Protection.—Owing to the favourable season there were few forest fires. Five outbreaks occurred but none of them became large, the whole area burned over being less than half an acre. The total cost of extinguishing these fires, including warden labour, was $104.73.

The Banff Fire Brigade, which consists of a voluntary staff of 25 men and officers, responded to 14 alarms. The total loss was approximately $1,750.

Mosquito Control.—The work in connection with the control of mosquitoes in the vicinity of Banff was carried on as in former years, through the assistance of the Entomological Branch, Department of Agriculture. Owing to frequent rains, often followed by extremely warm days, conditions were unfavourable and necessitated careful and continuous work. It is gratifying to note that in spite of these difficulties the nuisance was kept well in hand.

Accommodation.—The large new wing of the Banff Springs hotel built by the Canadian Pacific Railway Company to replace the old north wing which was destroyed by fire was opened for the 1927 season. The new addition is of fireproof construction throughout and greatly enlarges and improves the appearance of this fine hotel, which now takes an outstanding place among the most luxurious hotels either on this continent or abroad.

Banff now possesses in all 12 hotels with a total of nearly 1,000 rooms and accommodation for approximately 1,600 persons per day. In addition there are 400 private houses renting rooms and 160 tent houses.

As described on page 84, a new motor campsite was laid out on Tunnel mountain and a sufficient area set aside to accommodate about 4,000 persons per night.

JASPER PARK

Development work in Jasper national park was carried on steadily with a view to meeting the demands created by the increasing use of the park. In Jasper townsite a number of improvements were made to the principal streets, new sidewalks laid and the boulevard on Connaught Drive planted with indigenous shrubs and trees. All the principal streets were given a coating of road oil to keep down the dust. The water service was extended to serve four new blocks. The town is now fairly well equipped with hydrants. These have a pressure of eighty pounds and with the completion of the service next year the town should have adequate protection in the event of fire.

The new dam at Cabin lake was completed. This dam raises the level of the lake three additional feet and should provide an ample supply of water for some years.

Several substantial buildings were added to the townsite, the total new construction being estimated at $80,000. Extensions and new buildings at Jasper Park lodge totalled approximately $240,000. A log chalet for the use of tourists was also erected at Maligne lake.

The roads and trails were maintained in exceptionally good condition and a number of improvements and extensions made to the system. The Mount Edith Cavell highway was improved by additional gravel surfacing and by the construction of a strong guard rail along the full length of the Portal Creek hill. The first 11 miles of the highway were also coated with road oil. At the terminus of the Cavell highway an additional mile of new road was built and a large park area cleared for the use of cars near the foot of the moraine. This brings the highway practically to the foot of the glacier. Trails to good view points and to the nose of the glacier were also constructed. Work was commenced on the construction of a tote-road, suitable for wagons, from Smoky Hollow to the bridge over the Whirlpool river. As there is already a rough road from the Cavell highway to Smoky Hollow, this now provides a wagon road from Jasper as far as the Whirlpool. In case of emergency such as a forest fire along the Whirlpool or upper Athabaska, this would be of great assistance. About two and a half miles were also added to the tote-road to Medicine lake, making it possible for cars to travel from Jasper practically to the lake. This not only shortens the trail journey for tourists who desire to visit Maligne lake but is also a great convenience for the teaming of supplies and for fire protection purposes.

Portal Creek trail, which affords a new route to the Tonquin valley, was completed and a number of improvements made on the Meadow Creek trail which is usually used as a return route. Work was continued on the new trail up the Smoky River valley to the warden's cabin at Smoky river, and at the end of the season 19 miles of new standard trail had been completed. A large bridge 90 feet long was built over Bess creek. A site for a motor camp was cleared adjacent to the Jasper highway, about one and a half miles north of the town.

The forest telephone system, which now totals 277 miles of line was inspected and kept in good condition. A new line was built from Hoodoo creek to Smoky River cabin, a distance of 26 miles. A great improvement was made by extending all forest lines from the Administration building to the cabin of the supervising warden. This enables all wardens to be in touch at any time of the night or day with headquarters.

WATERTON LAKES PARK

The opening last summer of the large Prince of Wales hotel built by the Great Northern Railway marked the beginning of a new era for Waterton Lakes park. This provision for high class tourist trade had an immediate effect upon travel and greatly increased the number of foreign registrations. Unfortunately the wet season impaired the condition of the connecting roads and interfered considerably with traffic. As it was, however, 14,134 visitors registered at the park of whom 11,374 were from Canada, 2,734 from the United States, 22 from transatlantic and 4 from transpacific points. The total number of motor cars entering the park was 4,823.

The wet weather also interfered with play on the golf links until the middle of July, but from that time to the end of the season the total number of rounds played was in excess of the previous year. Marked improvements were made in the townsite by the planting of trees and flower beds and the grading, gravelling, and oiling of the streets. The entrance roads were also widened and otherwise improved. A blacksmith's shop, storehouse and wagon-shed were erected at headquarters and improvements made to the administration building. The growth of the townsite has been very marked in the last few years. Buildings erected last season included a number of private residences, a business block of a good type, a new barracks building for the Royal Canadian Mounted Police and a new Anglican church. After the main building of the Prince of Wales hotel was completed, construction was begun on a large building for the accommodation of the help.

Trails.—Work was continued on two trails which will greatly extend the opportunities open to the tourist. The new Bosphorus trail was completed by the construction of three additional miles. This trail follows the east shore of Waterton lake and joins the trail to Hell Roaring canyon. Two miles more were also built on the Hell Roaring Canyon trail and 2½ on the trail to mount Carthew.

Game.—Nearly all species of big game are still increasing in the park. Mule deer, mountain sheep and goat, elk, and both black and grizzly bears are seen in larger numbers. Moose have been reported in the Belly River district and white-tailed deer were seen for the first time near Cameron lake. Marten and beaver are also plentiful.

Fishing.—Fishing, which is one of the great attractions of the park, proved better than ever this season, excellent catches being reported, especially from the Bertha Lake district. As in former years valuable donations of fry were received from the Glacier national park, Montana. They comprised 13,000 eastern brook trout fry which were distributed in Hell Roaring creek and Cameron creek.

KOOTENAY PARK

Kootenay national park also had a very successful year. Owing to the heavy snowfall on the Vermilion and Sinclair summits, the Banff-Windermere highway did not open until the first of June. Travel, however, began almost immediately and during that month 1,544 cars went over the road.

The Banff-Windermere highway was in unusually good condition throughout the whole season. Improvements and widening were carried out at various points, particularly between Kootenay crossing and Vermilion summit. Clearing was done on the areas adjoining the highway which were burnt over in the bad fire of last year, and grass sown. The moist season allowed the seed to get a good start and it is evident that the clearing is not only improving the scenery by permitting longer vistas but is also providing additional pasture for game.

While Kootenay park is primarily a highway park created to preserve national park conditions throughout the region traversed by the Banff-Windermere highway, as time goes on and the territory within its borders is more thoroughly explored, it is becoming evident that it possesses many features of special interest to tourists. The number of visitors who remain over in the park and undertake hiking or pony trips is steadily increasing. Last year two new trails were constructed, one up Prospector's valley about eight miles in length, and the other from the highway at Hawk creek to Floe lake, a distance of seven and a half miles. The latter will provide an interesting one-day excursion. The trail is a steady ascent but it affords fine views, and the long cascade of Floe creek is very picturesque.

The number of bathers at the Government swimming pool and Radium Hot Springs from April 1 to October 15 showed a very large increase. These included, adults 12,189; children 2,040; total 14,229; an increase of 3,345 over the previous season.

The most important project was the building of the new baths at these springs. The old building, which was small and of temporary construction, had proved inadequate for present demands. The new building, which was begun in September, will contain dressing rooms, lockers, showers, and rest rooms and an enlarged swimming pool. It is expected that construction will be completed in time for the opening of the tourist season of 1928.

YOHO PARK

The most important event in Yoho park was the completion of the Kicking Horse Trail and the consequent throwing open of the park to through travel. As soon as the weather conditions permitted in the spring, large crews of men were put to work on the completion of the western section of the new highway a distance of 21 miles from Field to Leanchoil. The provincial Government also rushed operations on the final section from Leanchoil to Golden and by the first of July the road was completed and ready for travel. The official opening took place on July 9 and through travel at once began. Between July 1 and October 30, 5,638 cars eastbound and westbound, carrying 18,541 persons, passed through the western gateway. Of these 4,640 were Canadian cars carrying 15,612 persons, while 998 were foreign cars carrying 2,929 persons.

The increased motor traffic due to the completion of this trunk road placed a heavy strain upon the existing roads to the Yoho valley and Emerald lakes. Practically every car entering the park visited these two popular points. Work on the widening of the Yoho road was continued and practically the whole distance, with the exception of about a mile, was brought up to a standard width of 18 feet. Additional widening was also carried out on the Emerald Lake road and a parking space for cars provided at the terminus of the road.

The increased motor traffic created also an immediate demand for camping accommodation. At the Kicking Horse campsite, three and one half miles east of Field, early in the year shelters with stoves, lavatories, etc., were erected. On July 1 a caretaker was appointed to handle the crowds and care for the cleanliness and sanitation of the camp. He remained on duty till September 6. During this period 1,483 cars carrying 5,418 persons camped overnight. As the facilities provided had been at times severely taxed it was decided in the autumn to erect an additional shelter building and to extend the water supply service.

A second campsite was also laid out on the western end of the road about six and one-half miles from the west boundary of the park, near the Kicking Horse river. This camp, which will be known as the Chancellor Peak campground, was also equipped with shelters and the other necessary conveniences.

During the summer, following the opening of the Kicking Horse highway, the gate-keepers at the western entrance were placed in temporary quarters

but in the autumn a substantial and attractive gateway building was erected. The structure is of stucco and contains, in addition to other quarters, a rest room and facilities for the use of the public.

The streets of Field were kept in good condition and economically treated with fuel oil waste, supplied by the Canadian Pacific Railway Company free of charge. Streets and sidewalks were improved with mine tailings, a material which makes a very satisfactory surface at slight cost.

Game and Fish.—No marked increase in game was apparent in Yoho park during the past year. It is believed this may be partly due to the severe forest fires of the previous summer when large numbers of animals apparently became terrified or were driven by the fire out of the park. Moose, too, have suffered heavily in the last two years. A considerable number have been killed by railway trains and others have wandered beyond park boundaries where they were shot by hunters.

Fishing conditions are improving in this park each year. During the past season all anglers reported excellent catches. The only re-stocking was done at lake O'Hara in which 12,000 rainbow trout fry were placed in September.

GLACIER PARK

The closing of the old Canadian Pacific Railway hotel, Glacier House, a couple of years ago deprived Glacier park of practically its only tourist accommodation and consequently reduced tourist travel. The park officers, however, have availed themselves of the quiet seasons to put the roads and trails into first class condition. Last year one new trail about three miles in length, was constructed up the Beaver valley running from the Beaver Valley trail up to the Prairie hills. This trail, which will be especially valuable for fire protection purposes, gives access to a wide open country on the Prairie hills from which the warden may overlook the whole Beaver valley.

Further development work at the Nakimu caves was carried out by the caretaker and assistants. Work was continued on the opening up of the passageway between No. 4 entrance and the exit near Beaver falls and practically completed. At one point a perpendicular rise of eighty feet was encountered which gave considerable difficulty. By building a flight of steps up to this level, however, the passage was continued and in future the tourist will be able to travel through No. 4 cave, the most extensive of the series, without having to retrace his footsteps. A survey of all the caves was made in the autumn by Mr. C. M. Walker, D.L.S., and his report has furnished valuable information from which a map can be made for the convenience of tourists and which will assist greatly in further developments.

MOUNT REVELSTOKE PARK

The motor highway, 18 miles in length, from the park gateway at the base of mount Revelstoke to Balsam lake on the summit was completed last year and officially opened by His Royal Highness the Prince of Wales on August 17. This road climbs back and forth across the face of mount Revelstoke ascending 4,515 feet in the course of the 18 miles. The views from the higher elevations are extremely fine. As a result of the completion of the road, traffic to the park was greatly increased. The building of a provincial highway through Eagle pass to Revelstoke has now established through connections with the Coast, and last year a large number of western cars from both Vancouver and the United States came to the park by this route. In view of this increasing travel it was decided to undertake new development work giving access to some of the chief places of interest. Two new trails were constructed, one running along

the western slope of the mountain towards the head of Six-mile creek, the other, from Greely creek depot towards the slopes of Clach-Na-Cuddin, which will assist visitors in reaching the ice-field.

In connection with their fire-protection service, with the consent of this branch, the Forest Service erected a lookout station at the summit of mount Revelstoke and maintained a warden there during the summer months. The park headquarters was connected by telephone with this station, which will afford both the national parks and the forest reserves valuable protection from fire.

The annual ski carnival took place in the park under the auspices of the Revelstoke Ski Club in January. The ski-jumping contests which provide the principal feature have become outstanding on the continent and attract some of the best skiers from Canada and the United States. Last year both snow and light conditions on the hill were perfect and hundreds of spectators were afforded a thrilling exposition of this sport at its best. Nels Nelson, world's champion, won the Class " A " event. While he did not exceed his previous world's record of 240 feet his splendid attempts to surpass it may perhaps never be equalled in the annals of skiing. Bob Linburne, a seventeen year old Revelstoke boy, won the Class " B " contest for the longest standing jump, with a perfect jump of 183 feet, surpassing the present world's record by 35 feet. Bob Crowle, in junior Class " E " made a splendid jump of 64 feet, beating the previous record of 43 feet held by Master Arthur Johnson. Ernie Field, of Revelstoke, won the gruelling cross country race of 7 miles, his time being 45 minutes and 5 seconds.

During the year a number of improvements were made by the National Parks of Canada on the ski hill. The long trestle take-off above the main jump was reconstructed and the angle of the incline increased. A new judge's stand was also built.

BUFFALO PARK

The shipments of buffalo to the Great Slave Lake region were, as in the two preceding years, a matter of first importance in Buffalo park. In the late autumn, during the round-up of the beef-stock, approximately 1,100 yearling calves were cut out of the herd and placed in a separate enclosure. During the winter these animals were fed and watered daily, and they came through in splendid condition. Early in April the usual spring round-up took place and approximately 800 more young animals were cut out and corralled.

On June 6 the first train load left Wainwright for the north. Additional shipments followed on each succeeding Monday up to the end of July, until a total of 1,940 buffalo had been sent forward. The animals were all sturdy one-, two-, and three-year-olds and, as in former years, the loss in corralling, loading and shipping was very small.

Aside from the normal decrease due to age there was practically no loss in the main buffalo herd during the winter. Grazing conditions in winter quarters were good so that little extra feeding was required and the herd was in an exceptionally good condition with the arrival of spring. A census taken at the close of the fiscal year showed a total of 4,241 buffalo in the park. Increases and decreases for the year were as follows:—

On hand as per census report dated May 12, 1927	6,027
Decrease since May 12, 1927, including animals shipped, slaughtered and natural decrease	2,986
	3,041
Increase, season 1927	1,200
Buffalo in park, March 31, 1928	4,241

At the time the above census was taken the herd was distributed as follows:—

In winter quarters	2,366
" shipping inclosures	1,123
" home paddock	115
" cattalo inclosure	8
" cattalo lane	3
" main park	626
Total	4,241

The count included 76 yearlings in the main park and 32 yearlings in the Home Paddock herd. The remainder of the herd, other than the shipping stock segregated, were nearly all five-year-olds and older. These animals included 425 males of from four to seven years; 566 males from eight to fifteen years and 47 males over fifteen years. Females four years old and upwards totalled 1,897.

Other animals in the park include elk (estimated), 475; mule deer (estimated), 1,650; moose, 54; antelope, 3; yak, 26; domestic cattle, 11; mixed stock, 38.

Farming operations were carried on as usual and approximately 500 acres were seeded with oats. About 55 acres were left for green feed and from the remainder 15,799 bushels were threshed. This yield was sufficient to meet all the requirements of the park including seed for the next crop and to allow shipment of 8,000 bushels to other national parks as well. Two hundred and fifty acres of land were summer-fallowed and ten acres of new ground broken.

Approximately 350 tons of straw were secured from the oat crop and this made splendid winter feed for the buffalo. About 850 tons of hay were also secured from the Ribstone meadow and 22 tons from the Home paddock. The usual maintenance necessitated the ploughing of 122 miles of fire-guard, repairs to 95 miles of fence and construction of three miles of new fencing, and repairs to 35 miles of telephone lines.

Sixty-one coyotes were destroyed in this park by the wardens, 45 being caught by dogs and the remainder shot.

Visitors.—The records kept at the different gates show that 12,679 people entered the park. The actual number of visitors greatly exceeds the above figures as, in the absence of a gatekeeper many do not register.

Each year the picnic grounds at Mott lake are becoming more popular. Picnic parties from every direction make use of these grounds and the improvements made for their convenience have been very much appreciated.

ELK ISLAND PARK

In Elk Island park the increased area has tended to improve the condition of the buffalo herd maintained there. Last year the buffalo fed out on the range the whole year and came through with a loss of only three animals. The total numbers of animals in this park are now: buffalo 729, moose 227, elk 454, deer 288.

Haying operations were interfered with by heavy rainfall; however 246 tons were stacked for the winter's feed.

POINT PELEE PARK

This charming reservation in southern Ontario is of increasing value as a sanctuary for bird life and as serving the recreational needs of this part of the province. The park is distant only about thirty-five miles by motor highway from the city of Detroit and is, consequently, visited by a large number of people from that section of the United States. Last year approximately 11,350 cars registered in the park carrying about 45,400 passengers. Two hundred and

fifty-five camping permits were issued, 210 of which were for less than three days. Of these, 150 were taken out by United States residents registering from 8 different states, while 60 showed Ontario registrations.

Next to its beautiful sand beaches fronting lake Erie the bird life forms, perhaps, the greatest attraction of the park. Thousands of birds visit the reserve during the spring and fall migrations and large numbers make it their breeding ground. Quail and pheasant, which remain throughout the year, are steadily increasing in numbers. Both black and grey squirrels are found in the park and appear to be rapidly increasing. An open season is allowed each year for shooting of duck during four days of each week from October 1 to December 15. Three hundred and twenty permits were issued to hunters during this period last year. Muskrats are also very numerous and an open season of ten days for trapping was allowed last year. On account of the severe cold which froze the marshes, only four days good trapping was possible, but in this period 400 more rats were taken than in the previous year.

FORT ANNE HISTORIC PARK, ANNAPOLIS ROYAL, NOVA SCOTIA

This interesting reservation continues to be one of the most attractive sites in the Maritime Provinces. Last year about 15,000 visitors entered the park of whom 9,787 registered and were personally conducted through the museum, an increase of 1,630 over the previous year. At times three attendants were necessary to handle the crowds. The visitors' book shows an increase in the number of persons conducted through the museum during the past nine years, from 2,152 in 1919 to 9,787 in 1927.

A number of interesting exhibits were added to the museum during the year including a collection of coins from 1604 to the present date. Lt.-Col. Prideaux, the expert numismatist, kindly gave his time and valuable advice to the making of this collection, and the expense in connection therewith was met by the Historical Association of Annapolis Royal. Collections of native birds, rocks, and minerals of the county of Annapolis were also added. A gift to the museum included a rare silver medal cast by the British Government in 1867 to commemorate the Confederation of Canada, the gift of an anonymous friend, and a rare engraving from the picture by Harris of the Fathers of Confederation.

The most important construction work was the building of a new pavilion on the site of the old British block house pulled down in 1882.

PRESERVATION OF TOTEM POLES

The interdepartmental committee for the preservation of totem poles in the Indian villages of British Columbia, of which the Commissioner of National Parks is a member, met several times during the year and laid out plans for the furtherance of the work. Mr. Harlan I. Smith, the well-known archaeologist, whose services were loaned by the National Museum of Canada, and who for the two previous years had been in charge of preservation work at Kitwanga, B.C., again directed operations, this year at the Kitselas canyon. Fifteen poles in all were found here. Of these twelve had already fallen and upon examination almost all of the poles were found to be badly decayed. Eight specimens however were restored. In each case a well-seasoned, creosoted supporting pole was inlaid at the back of the original pole, the old pole was thoroughly oiled to preserve it from the weather and re-erected in a cement foundation immediately below the soil. Attempts were made to restore the original colouring of the poles in harmony with their antiquity. To date twenty-six poles, all within easy access, have been restored. Mr. Smith reports, however, that there are still twenty-four poles standing within sight of the railway and sixty others within a radius of 15 miles which should be preserved. It is gratifying to note that the Indians themselves evinced great interest in the work and with very few exceptions showed a willingness to assist the Government in every way.

Protection of Migratory Birds

The work in connection with the protection of migratory birds and the enforcement of the Migratory Birds Convention Act was carried on by the Migratory Birds Division of the National Parks of Canada as in former years. There was complete co-operation with provincial authorities, to whom the enforcement of bird protection measures has largely been left. As in former years, hundreds of honourary game officials also lent their assistance and furnished this office with valuable information respecting bird conditions in their localities. By a system of circular letters sent from Ottawa they were kept informed of the work of other honourary game officials and of bird conditions generally. Officers of the Royal Canadian Mounted Police helped materially in the enforcement of the law and the conduct of investigations.

The Chief Federal Migratory Bird Officer for the provinces of Ontario and Quebec, with a staff of temporary assistants, patrolled the gulf of St. Lawrence during the summer with a view to protecting the abundant sea bird life of the north shore. During the winter he made patrols in both provinces and delivered addresses on birds and bird protection.

The Chief Federal Migratory Bird Officer for the western provinces made patrols throughout these provinces and supervised the sanctuary and public shooting grounds. In co-operation with the Biological Board of Canada he also carried on a study of the food habits of marine birds with special relation to the spawning of herring.

In June last, following suggestions from provincial game officers and the chief federal migratory bird officers, a number of amendments were made to the regulations for the enforcement of the Migratory Birds Convention Act. These included a close season throughout the year for yellow-legs and an earlier season for geese and brant in the western section of British Columbia north of the 52nd parallel, a change in the western and eastern districts of British Columbia and the inclusion of Queens county, Nova Scotia, with the district of Yarmouth, Shelburne, and Digby for ducks and rails. The close season for wood ducks was continued; and the protection for eider ducks in Quebec continued throughout the year; the use of the rifle for taking migratory game birds was prohibited in the electoral districts of Chilliwack, Dewdney, Delta, Richmond, Point Grey and South Vancouver, in British Columbia. A provision was placed in the regulations regarding the issue of permits allowing the capture of migratory birds for banding. A consolidation of the Migratory Birds Convention Act and of regulations containing these amendments was printed and distributed prior to the opening of the hunting season.

To ascertain whether continued protection for the wood duck was desirable letters were sent to people in the provinces of Ontario and Quebec familiar with bird conditions in their respective districts inquiring about the status of the species. The information received indicated that this species is scarcely holding its own and that continued protection should be given it under the Migratory Birds Convention Act.

In January, 1928, a Dominion Game Conference was called at Ottawa by the Minister of the Interior. Representatives from each province and chief federal and provincial game officers were present, as well as the Chief of the United States Bureau of Biological Survey, Washington, D.C. The conclusions reached by the conference were expressed in the form of fourteen resolutions which dealt with the following matters: Changes in the provincial regulations respecting the hunting of game mammals and birds; the reduction of daily and seasonal bag limits; the prohibition of auto-loading firearms; the licensing of hunters and the recording of all game killed and taken; the formation of a Dominion Fish and Game Protective Association; further protection for the wood duck until January 31, 1931, coupled with the proposal that sanctuaries be set

aside for this species; the establishment of additional public shooting grounds; an amendment to the Migratory Birds Convention Act Regulations in respect to damage done to crops by migratory birds; the protection of western bird sanctuaries, and the checking of shipment of game trophies taken in Canada and being sent to foreign countries. The conference also approved the policy of reserving suitable areas wherein Indians alone may trap.

Oil Pollution.—A serious loss in bird life due to the dumping of oil from vessels in navigable waters, or reaching navigable waters in other ways, received much attention. During the week of November 14, a national conference in which Canada took part was held at Washington and a draft convention on oil pollution of the high seas was prepared and is now before the Maritime Powers.

Waterfowl Census.—This branch is co-operating with the United States Bureau of Biological Survey in undertaking a waterfowl census throughout Canada. Plans are being made to carry out this work during the next few years so that it may be decided whether waterfowl are increasing or decreasing during any given period and that shooting restrictions may be modified accordingly.

Bird Banding.—The central registry in connection with the banding of wild birds, a work which is affording much valuable information with respect to the distribution, breeding habits, and migratory flights of wild birds, was maintained as usual in the branch. During the year 11,287 records of birds banded by Canadian co-operators, and 7,872 repeats and returns on birds already banded were received. Mr. Jack Miner, of Kingsville, Ont., who since 1909, has banded several hundred Canada geese and many ducks, has transferred to the branch all letters which he has received reporting returns on his banded birds. This information proved a valuable addition to the Official Canadian Record of Bird Banding Returns and has been prepared for publication.

Bird Sanctuaries and Public Shooting Grounds.—Minor changes have been made in the boundaries of Quill Lake bird sanctuary and Crane Lake bird sanctuary, Saskatchewan. Minor changes have also been made in the boundaries of the following public shooting grounds: Jackfish Lake, Saskatchewan; Lake Francis, Manitoba; and Marshy Point, Manitoba.

Educational Work.—Educational work was carried on as formerly through the distribution of pamphlets, posters, the Migratory Birds Convention Act and abstracts of the regulations. Circular letters regarding the changes in the regulations for 1927 were distributed to the Canadian press. A reprint of 100,000 copies of the pamphlet "Lessons on Bird Protection", in English, and 20,000 of "Bird Houses and their Occupants", in French, was necessitated by numerous demands. Lectures on bird protection were given by members of the permanent staff and lantern slides were furnished to honourary game officials and others for lecture purposes. Various camps attended by young people were also visited during the summer and instructions given in bird protection and natural history subjects.

The lantern slide library now contains 4,770 slides, covering 948 subjects, and showing 338 different species of birds. Slides totalling 4,241 were lent during the year.

The radio was also utilized for lecture purposes and from time to time items of interest were broadcasted to explorers and others in the far north.

Trumpeter and Whistling Swans.—During the spring swan migration a number of whistling swans alighted above Niagara falls during a thunder storm and were swept over the falls, several of the birds being killed and many injured. This department co-operated with the Ontario Department of Game in caring for the injured birds. Several of these were sent to the Ontario Provincial Game Farm and a number of dead birds were forwarded by the province to recognized

museums. While accidents of this nature are extremely regrettable they are, fortunately, rare, occurring only when the spring migration reaches the upper Niagara river during stormy or foggy weather.

Bird Census.—A Christmas bird census was made at many points by members of the various naturalists' clubs and by officers of this branch. At Ottawa 22 species were found and 1,935 individuals. These winter bird censuses taken from year to year give a comparative idea of the distribution of bird life at a time when it is at its lowest ebb.

Eggs of Marbled Murrelet.—The most outstanding ornithological event of the year in Canada was, probably, the discovery of the eggs of the marbled murrelet. These were found by Mr. Solomon John Darcus, of Penticton, B.C., while collecting specimens for scientific purposes on the west coast of Queen Charlotte Islands, B.C. The nesting of this species has been unknown since the discovery of the species in 1789.

Prosecutions.—Eighty-seven prosecutions were instituted by Dominion officers in connection with the enforcement of the Migratory Birds Convention Act. These resulted in 69 convictions, 14 suspended sentences, and 4 cases were dismissed. Fines imposed amounted to $1,102. Prosecutions instituted by provincial officers are not included in this summary.

Permits and Licences.—Permits and licences were issued as follows (calendar year 1927):—

Collection of birds for scientific purposes	270
Possession of birds for propagating purposes	448
Capture of birds for propagating purposes	36
Destruction of certain birds when found to be seriously damaging agricultural or fishery interests	54
Taking of birds for banding purposes	103
Practising taxidermy	80
Shooting of geese and brant in Queens and Shelburne counties, Nova Scotia, in the open season provided by law	296

Historic Sites and Monuments

The preservation, restoration, and marking of historic sites of national importance throughout Canada has been carried on throughout the year. The usual sitting of the Historic Sites and Monuments Board was held in Ottawa in May. Of the sites considered twenty were selected for commemoration. During the past year twenty-four sites were marked, making a total of one hundred and three since the inception of the work seven years ago.

The public interest and sympathy felt for this national undertaking is increasingly manifest not only in the number of inquiries received concerning them but in the increase of visitors to the sites themselves.

Marking of Historic Sites

The work done in the different sections of the country was as follows:—

MARITIME PROVINCES

Louisbourg, N.S.—Preliminary steps were taken in the matter of acquiring approximately three hundred acres of land for the creation of a national historic park surrounding the historic fortress.

A cairn, to which is affixed a tablet, was erected on a plot of ground, provided for this purpose by Mr. Hugh Ross, K.C., near the original west gate of the fortress, to mark the site of Dauphin bastion, built by the French in 1738 and demolished by the British after its capture in 1758.

Sydney, N.S. (Joseph Wallet des Barres).—A tablet was affixed to the front of the Post Office building on Dorchester street to commemorate the public services of Joseph Wallet des Barres, the distinguished military engineer employed by the British Government to survey and chart the eastern coast of North America and later first Lieutenant-Governor of Cape Breton (1784-87) and the founder of Sydney.

Battle of Shannon and Chesapeake, Halifax, N.S.—A monument of cut granite with a bronze tablet was erected on the grounds at Admiralty House, Halifax, to commemorate the notable defeat and capture of the United States frigate *Chesapeake* off Boston harbour, by H.M.S. *Shannon,* of Halifax, June 1, 1813.

Yorkshire Settlement, Chignecto.—A cut-stone monument of special design, to which is affixed a bronze tablet, was erected in Fort Beausejour historic park to commemorate the Yorkshire settlers of the counties of Westmoreland and Cumberland who during the American Revolutionary war loyally supported the authorities and helped to quell the Eddy rebellion of 1776.

Tonge's Island (Ile de la Valliere), N.B.—A cut-stone monument to which is affixed a bronze tablet, was erected in Fort Beausejour historic park to commemorate events connected with the site of Ile de la Valliere, once capital of Acadia, situated between Fort Beausejour and Fort Lawrence. The island was granted to Michel Le Neuf de la Valliere, Seigneur of Chignecto, in 1676, who acted as Commandant and Governor there under Count de Frontenac, 1678-84.

QUEBEC

Fort Ste. Therese, near St. Johns.—A boulder with tablet was placed in the Bunker United Empire Loyalist burial grounds to mark the site of Fort Ste. Therese, built in 1665 by M. de Salieres, for defence against the Iroquois. The fort remained in existence until 1760, when it was burned by Major Robert Rogers.

Battle of Lacolle, Lacolle.—A cairn with tablet, surrounded by a suitable fence, was erected on a small plot of land, donated by Mme. Joseph Boudreau, to perpetuate the memory of the officers and soldiers of the 13th Regiment, Royal Marines, from Ile-aux-Noix, and of the Canadian Fencibles and Canadian Voltigeurs, who lost their lives at the Battle of Lacolle, March 30, 1814. The United States troops, after a severe attack on the stone mill on Lacolle creek, near the present bridge on the highway, were compelled to retire with heavy losses and to abandon their plan of campaign.

Madeleine de Vercheres, Vercheres.—A tablet was affixed to the existing monument, located near the river St. Lawrence, at Vercheres, to perpetuate the memory of Madeleine de Vercheres, who, in 1692, with her two brothers, an old servant and two soldiers, successfully defended Fort de Vercheres against a war party of Iroquois.

Battle of the Cedars, Cedars.—A cairn with tablet was erected on a plot of ground donated by Mr. Adolphe Tessier, opposite his residence, to commemorate the events associated with the Battle of the Cedars May 19-21, 1776, when two invading United States forces were surprised by a company of Canadians and Indians and forced to surrender.

Battle of Ile-aux-Noix, Fort Lennox.—A tablet was affixed to the gateway at the north entrance to Fort Lennox to commemorate the events associated with the naval battle which took place on the Richelieu river nearby on June 3, 1813, ending in the capture of the United States sloops *Eagle* and *Growler.*

Sir Wilfrid Laurier, St. Lin.—A cairn with tablet was erected on a plot of ground in front of the town hall to commemorate the public services of Sir Wilfrid Laurier, late Premier of Canada, who was born at St. Lin. This work was carried out at the request of the National Committee for the celebration of the Diamond Jubilee of Confederation.

ONTARIO

Pointe au Baril, Maitland, Grenville County.—By permission of Dr. R. E. Webster, a tablet was affixed to the old stone tower adjacent to the Montreal-Toronto highway, to mark the site of Point au Baril, where the last French ships of war that navigated lake Ontario were built.

Fort Norfolk, Turkey Point, Norfolk County.—With the consent of the provincial Government a cairn with tablet was erected on lot 14, concession A, township of Charlotteville, to mark the site of Fort Norfolk, built 1812. The famous missionary, Dollier de Casson, and party encamped at this site March 26, 1670. It was selected by General Simcoe as a site for a fort and naval station in 1795 and during the war of 1812-14 it served as a defence for that part of Upper Canada.

Point Pelee, Leamington, Essex County.—A cairn with tablet was erected near the new pavillion in Point Pelee park to commemorate the several early events which took place there. These were: the encampment of Dollier and Galinee, April, 1670; the landing of Brock's forces, August 12, 1812, on the way to the famous attack upon Detroit; the defeat of an American detachment on the beach by Wyandottes, during the Pontiac war; the battle of Pelee Island, March 3, 1838, during the Upper Canada rebellion.

McKee's Point, Sandwich, Essex County.—A cairn with tablet was erected on a plot of ground provided by the town at the intersection of Sandwich and Main streets to mark the starting point of General Brock's expedition, August 16, 1812, to attack Detroit—the notable expedition which resulted in the surrender of the Detroit garrison, although greatly superior in numbers.

Sir John A. Macdonald, Adolphustown, Addington County.—A cairn with tablet was erected on a plot of ground in Lot 19, third concession of the township of Adolphustown, which was donated by Mr. A. R. Davis, to mark the old home of Sir John A. Macdonald. This work was carried out at the request of the National Committee for the celebration of the Diamond Jubilee of Confederation.

Sir John A. Macdonald, Kingston.—A tablet was affixed to the outer front wall of the building at 102 Rideau street, Kingston, the boyhood home of Sir John A. Macdonald. This work was also carried out at the request of the National Jubilee Committee.

Kaministiquia Portage, Pointe de Meuron, Fort William.—A cairn, tablet, and fence were placed on a plot of ground, donated by Col. S. C. Young, on lot 19 in the first concession north of the Kaministiquia river, between Fort William and Port Arthur, to mark the site of the canoe landing at the beginning of the long "Portage Route" to the Great West. This trail was used by the Indians long before the arrival of the white man and subsequently by French, British and Canadian discoverers, explorers and traders.

WESTERN CANADA AND BRITISH COLUMBIA

Cluny, Alta. (Indian Treaty No. 7).—A cairn with tablet was erected on the southerly half of section 21, township 21, range 21, west of the 4th meridian, in the Blackfoot Indian reserve, to commemorate the events associated

with the signing of Indian Treaty No. 7, September 22, 1877, whereby the Blackfeet, Blood, Piegan, Sarcee, Stony and other Indian tribes surrendered their rights to 50,000 square miles of territory lying in southwestern Alberta.

Jasper House, Alta.—A cairn with tablet was erected along the Jasper highway, near the Rocky river, Jasper national park, to mark the site of the old Jasper House, built at the northern end of Brulé lake by the North West Company about 1813 and about 1837 removed to a site on the west bank of the Athabaska, opposite the mouth of the Rocky river. For half a century this post was a main support of the trade route across the mountains.

New Westminster, B.C.—A cairn with tablet was erected on a grassy plot immediately in front of the entrance to the British Columbia penitentiary to commemorate the several historic events associated with New Westminster, the first capital of the colony of British Columbia.

Nanaimo, B.C.—A granite block, to which is affixed a tablet, was erected in Dallas square to commemorate the discovery of the first coal mine in British Columbia, in 1852, and the consequent inception of an industry which has largely contributed to the industrial life of the province and aided in the growth of trade on the western coast of Canada.

Fort Hope, Hope, B.C.—A cairn with tablet was erected at the foot of Wallace street, near the Fraser river, to mark the site of the stockaded post at Hope, built in 1848 by the Hudson's Bay Company, and the building of the old "Brigade Trail". The post was an important point in the company's transportation system and the place of transfer from water to land travel. Hope was also the centre of the earliest gold mining on the Fraser.

Preservation Work

At a number of the larger sites controlled by the department, preservation and other improvement works were carried out on the structures located thereon and to the grounds, of which the following are the most important:—

Fort Cumberland, N.B.—A pavilion was erected in the park, repairs made to the old powder magazine, the entrenchments were cleared of debris and the site generally cleaned up.

Martello Tower, Halifax, N.S.—Extensive repairs were carried out on the masonry of the exterior wall of the tower in Point Pleasant park. The inner stairs and floors were renovated.

Fort Chambly, Chambly Basin, P.Q.—Repairs were made to the living quarters, the observation tower, the dungeon and magazine, and to the stone retaining wall facing the Richelieu river. Trees were planted on the picnic grounds and camp stoves provided for the convenience of tourists.

Fort Lennox, Ile-aux-Noix, P.Q.—Repairs and improvements were made to several of the old buildings. The chimneys and embankment of the old ovens were repaired and camp stoves constructed for the convenience of tourists and campers.

Fort Wellington, Prescott, Ont.—The exterior woodwork of the blockhouse was painted, new conveniences installed, inner palisades repaired, and electric lights placed in the museum.

Acquisition of Sites

Action was also taken in regard to the acquisition of other sites recommended by the Board for future marking, and control of the following has been obtained:—

MARITIME PROVINCES

Admiral d'Anville's Encampment, Bedford Basin, N.S.—Mr. E. Clayton has donated a plot of ground 20 feet square adjacent to the old French landing road on the outskirts of Halifax to mark the site of the landing place of the ill-fated squadron under the command of duc d'Anville, in 1746, which attempted the re-capture of Acadia.

QUEBEC

Battle of Two Mountains, near Senneville.—Mr. and Mrs. Waldo W. Skinner have donated a plot of ground, 25 feet square, adjacent to the Senneville road, for the erection of a memorial to commemorate the events associated with the engagement which took place in 1689 on the lake of Two Mountains, between the French and Iroquois, which resulted in the defeat of the Indians and the saving of the island of Montreal.

Chateauguay Ford Battle, Allan's Corners.—Mr. Wm. Kerr, of Howick, has donated a plot of ground, 25 feet square, adjacent to the Montreal-Malone highway, on which to erect a memorial to commemorate the events connected with the flank engagement of the battle of Chateauguay which took place on October 26, 1813, between the Canadian forces and the invading United States troops.

ONTARIO

Battle of Ridgeway, Ridgeway, Welland County.—The Council of the Township of Bertie has donated a plot of ground, 25 feet square, adjacent to the Garrison road, for the erection of a memorial to commemorate the engagement of June 2, 1866, between a force of Canadian militia and a body of Fenians.

Battle of York, Toronto.—The Provincial Government and the city of Toronto have granted authority for the placement of a bronze tablet on the Province of Ontario building, in the Exhibition Grounds, to commemorate the events associated with the battle and capture of York, April 27, 1813.

PRAIRIE PROVINCES AND BRITISH COLUMBIA

Lower Fort Garry, near Winnipeg, Man.—The Hudson's Bay Company has granted permission to place a tablet at the gateway of Lower Fort Garry to mark the site on which Indian Treaty No. 1 was signed.

Lethbridge, Alta.—The civic authorities have provided an area in Galt park for the erection of a cairn and tablet to mark the development of the first coal mine in Alberta and the services of Nicholas Sheran, the first man to recognize and assist in developing the coal resources of the province.

Fort Steele, B.C.—The executors of the R. T. Galbraith estate have donated a plot of ground, 25 feet square, adjacent to the Fort Steele-Bull River highway for the erection of a memorial to mark the site of Fort Steele, the first fort of the North West Mounted Police in British Columbia.

APPENDIX

Report of the Secretary of the Alpine Club of Canada, Little Yoho Camp, 1927

The twenty-second annual camp of the club was held in the Little Yoho valley from July 19 to August 2, 1927. The lovely site familiar to many members as that of the last camp before the war was as attractive as before, though owing to the long preceding winter, flowers and growth generally were late in making their appearance. The weather was delightful. Only one storm occurred, certainly a bad one, but it was in the evening and no one was inconvenienced.

The attendance was smaller than usual, but there were no outlying camps and the camp membership was compact and congenial.

Construction was under the experienced direction of Mr. C. A. Richardson, of Calgary, and all went well. Members motored to the Canadian Pacific Railway camp at Takakkaw falls and thence walked along the upper trail and across the open alplands to camp. A few travelled via Burgess pass and some by Emerald lake.

Most of the graduating climbs were made on mounts President and Vice-President. Mount Marpole, an interesting rock climb, was accepted as entitling to the badge. Mount des Poilus, still often spoken of by its former name, mount Habel, was climbed several times but was a long distance from camp. The isolated peaks, mount Kerr and mount McArthur, being near the camp, were very popular. One first ascent was made. On July 31 Messrs. L. Grassi, G. A. Gambs, N. L. Goodrich, and M. Cropley climbed mount Olive, near mount Gordon, by a difficult route, returning by a much simpler way. The mountain was named by Prof. Harold Dixon, in 1897, from the colour of its rock.

The Yoho region abounds in opportunities for delightful excursions. Twin falls, the Yoho glacier, Kiwetinck lake and the pass beyond, Takakkaw falls, Yoho (miscalled Summit) lake, Burgess pass, all attracted members again and again.

Dr. Bell, the President, ill in Vancouver, was greatly missed, as was also Mr. A. O. Wheeler, the popular director of the club for many years, who was called elsewhere on business. This is the second camp in the whole history of the club from which Mr. Wheeler has been absent. Other members of the executive were unable to be present but those there worked hard and all went well.

Among the guests of the club, Mr. N. E. Odell, of mount Everest fame, was outstanding. He delighted the camp by his story of the last attempt told in vivid language at the camp fire. Mrs. Odell, Mr. W. H. Lewin, from England, Mr. Murray Gibbon, of the Trail Riders and the C.P.R., were welcome visitors. Senator Bostock was the first visitor of political standing to visit camp. One hundred and one persons were placed under canvas, among them being representatives of the Alpine Club of England, the American and Swiss Alpine Clubs, the Climbers Club, the B.C. Mountaineering Club, the Appalachian Mountain Club, the Ladies' Alpine Club, and the Royal Geographical Society. Members present were drawn from England, Scotland, Canada and the United States.

Report of the Secretary of the Alpine Club of Canada, Banff Club House, 1927

Registrations at the club house were the largest since 1920, in which year the annual camp being held at mount Assiniboine, many members stayed in Banff on their way.

Considerable addition was made to the domestic equipment and gifts were received from various sections of the club and from friends. It is hoped to make various improvements during the coming season. The canvas tent houses, built in 1909, are nearing their end and timber huts will be substituted as opportunity offers.

The season, from the weather point of view, was not a very favourable one, and the club house was closed early in September.

Several climbs were made of mount Edith, and mount Louis was again climbed without professional guides. Mount Norquay is always a popular training climb made several times a season. Mounts Cascade and Rundle are voted dull.

The new climbing hut in Prospectors' valley has proved a great success. It makes a fine base for climbing the Ten Peaks and other mountains in the neighbourhood. The club is greatly indebted to the National Parks of Canada for improving the Prospectors' Valley trail which will probably be well used in future. The club hopes, as conditions permit, that huts will be erected on other suitable sites. This will encourage original climbing and develop the mountaineering art.

Several important expeditions were made during the season. Mr. W. A. Don Munday again led an attack on the so-called "Mystery" mountain and again Fate said "No." It is hoped that in 1928 the result of previous experience will avail to ensure the conquest of this fine peak.

Mr. A. J. Ostheimer III led an important expedition in the Columbia icefield country, details of which are not yet to hand.

Many distinguished visitors were at the club house, including General Sir W. Furse, of the Imperial Institute; Capt. Douglas King, Secretary of the War Office; General C. H. Mitchell, of Toronto; Colonel Crookshank, M.P., of His Majesty's Body Guard; General Ross, of Montreal; Mr. N. E. Odell, one of the Mount Everest expeditioners; and others. As always, the club house was a centre of information on mountain matters to many visitors.

The attendance at the club house was 339, drawn from England, Scotland, Ireland, Belgium, Tasmania, the United States and Canada.

IV

WATER POWER AND RECLAMATION

REPORT OF THE DIRECTOR AND CHIEF ENGINEER OF WATER POWER, J. T. JOHNSTON

Introductory

The organization of this service remains the same as for previous years and the reader is referred in this connection to the Annual Report of the Department of the Interior for the fiscal year ended March 31, 1926.

International Waterway Matters

During the year international waterway problems continued to receive close consideration, and appropriate action was taken from time to time in connection with the various matters arising.

The special International Niagara Board, appointed by the Governments of Canada and the United States to determine how the scenic beauty of Niagara falls and rapids can best be maintained and by what means and to what extent the impairment thereof by erosion or otherwise can be overcome, and, consistent with the preservation of the scenic beauty of the falls and river, to determine what quantity of water might be diverted from the river for power purposes, submitted to the two Governments on December 14, 1927, an interim report recommending the early construction of certain initial remedial works designed to rewater the presently bared flanks of the Horseshoe falls, to ensure an adequate supply of water to the rapids in the vicinity of the Three Sisters islands and a dependable flow over the American falls.

Following the submission of the interim report the board continued its compilation and study of the basic data underlying the problem, preparatory to formulating its final report.

The suit between the complainant States of Wisconsin, Minnesota, Pennsylvania, and Ohio vs. the Chicago Sanitary District, before the United States Supreme Court, in reference to the diversion of water from the Great Lakes system through the Mississippi watershed, has been closely followed, in view of its importance to Canadian interests. Following various hearings held by Special Master Charles E. Hughes, oral argument was presented on May 31, June 1, 2, and 3, 1927, and Mr. Hughes' report to the United States Supreme Court was made on November 23, 1927. On June 3 the Supreme Court allowed thirty days in which exceptions to the Special Master's findings might be filed. The complainant States filed their exceptions and a further hearing will be held at an early date before the Supreme Court of the United States at which the contending parties will present their final argument. The court's decision may be expected on some date following the hearing of the final arguments.

The Lake of the Woods Convention between Canada and the United States, executed on February 24, 1925, embodied a number of provisions which require departmental action. The Canadian Lake of the Woods Board has continued its regulation of Lake of the Woods between elevations 1056 and 1061 sea level datum, as elsewhere recorded in this report. The International Lake of the Woods Board, appointed under the Convention, is called upon to exer-

cise its responsibilities whenever the lake rises above elevation 1061 or falls below elevation 1056 sea-level datum. On April 22 last, the abnormally high water conditions in the watershed resulted in the lake rising above the upper limit and the International Board accordingly automatically took over the regulation. The board exercised its regulatory control until August 15, on which date the lake had dropped to elevation 1061 and the Canadian Board resumed its control. In accordance with the requirements of the Convention, the International Board, in July, 1927, approved the plans of the reconstructed Norman dam and of the enlargement of the western outlet from the lake.

The Convention also provides for the securing of flowage easement up to elevation 1064 on the United States shores of lake of the Woods. Officials of the department have been, during the past season, in active co-operation with the United States officers charged with the responsibility for carrying out this provision of the convention.

Incorporated in the Lake of the Woods Convention is the Rainy Lake Reference to the International Joint Commission, which has to do with the provision of storage in Rainy lake and in the boundary waters above, and with the development of power in connection therewith. Intensive field and office investigatory work in connection with this reference has been under way during the year and excellent progress has been made. The investigations will be continued during the forthcoming season.

The St. Lawrence River Power Company filed with the United States War Department, on June 9, 1927, an application to raise the crest of the Company's existing submerged weir in the South Sault channel of the St. Lawrence river near Massena, N.Y., and in January, 1928, the company's application was filed with the International Joint Commission. The commission arranged for a hearing on the company's application, to be held upon the occasion of the April meeting of the commission in Washington.

The Creston Reclamation Company, on October 14, 1927, submitted a formal application to the International Joint Commission for approval of its project for the reclamation by dyking on 8,600 acres of land in Kootenay flats on the Kootenay river. The commission held a hearing *re* this matter on November 29, 1927, at Nelson, B.C., at which all parties interested submitted representations. The issuance of the commission's order was withheld to permit of further investigations being made.

Other international problems have been active, such as those in connection with drainage and flooding on the Roseau river in Manitoba, and the Columbia River reclamation project in the United States and its effect upon the Pend d'Oreille river in British Columbia.

The various International Waterway Boards have functioned as usual throughout the year.

In accordance with the rulings of the International Joint Commission made on October 4, 1921, in conformity with the Boundary Waters Treaty of 1909, the measurement and apportionment of the stream flow in the St. Mary and Milk rivers and their tributaries in the provinces of Alberta and Saskatchewan and in the state of Montana, were continued throughout the past year by an engineer of this service, in co-operation with an engineer of the United States Reclamation Service. The report covering the year's operation has been prepared and submitted to the commission for review upon the occasion of its regular semi-annual meeting in April.

The International Lake Superior Board of Control continued to exercise its responsibilities with respect to the regulation of lake Superior throughout the year. Records of discharge through the rapids, navigation canals and power plants on both sides of the river were systematically reported to the board. The precipitation in the Lake Superior basin continued the marked improvement

which began in 1926. The influence of this increased precipitation is apparent in the gradual bettering of the lake levels. During the year the repainting and reconditioning of the Canadian section of the control dam were completed, following the completion of similar work on the United States end of the dam in 1926. The work of recalibrating the sluices of the control dam and other outlets was continued.

The International Niagara Board of Control has continued its close regulation of the diversions from the Niagara river for power purposes as permitted by Article V of the Boundary Waters Treaty. Continuous records of the withdrawal of water by all power stations on both sides of the river are obtained by the board, and the control exercised is such as to ensure that the limits of diversion set forth in the treaty are not exceeded.

Conditions obtaining with respect to the submerged weir in the South Sault channel of the St. Lawrence river and the regulation of flow through the Massena canal were subject to the supervision of the International Massena Board of Control throughout the year, in accordance with the order of the International Joint Commission dated December 6, 1922. The board was in receipt of monthly reports showing the amount of water diverted and the power-house performance from day to day. No abnormal conditions developed during the year.

The International St. Croix River Board of Control continued to exercise its supervision over the discharge of the St. Croix river past the Grand Falls dam, in accordance with the orders of the International Joint Commission dated November 9, 1915, and October 3, 1923. The board was in receipt of systematic reports of the discharge of the river and of the water elevations above and below the Grand Falls dam. No abnormal conditions developed during the year. A satisfactory flow of water has been maintained in the river below the dam for the benefit of the power users and for the supply of water for the fishways.

Water Power

Lake of the Woods Control Board

The Director of the Dominion Water Power and Reclamation Service and the Chief Engineer of the Department of Public Works represent the Dominion Government on the Canadian Lake of the Woods Control Board. The province of Ontario is represented by provincial officials. The responsibilities of the board are concerned with the regulation of the levels and outflow of lake of the Woods and for the proper performance of these duties the collection of hydrological data relating to the watershed is pre-requisite. The board is now deriving the benefit of comprehensive basic records which have been gathered by Dominion officials over a period of years.

During the fiscal year the board was called upon to regulate the levels and outflow of the lake in the face of the highest flood inflows on record.

The lake of the Woods had reached elevation 1060·01 on April 1, 1927, and in spite of continued increases of the regulated outflow, the level rose above elevation 1061·00 on April 22. By virtue of the provisions of the Lake of the Woods Convention, the regulation of the lake on reaching this elevation automatically passed into the hands of the International Lake of the Woods Control Board. Close co-operation was maintained between the Canadian and the United States members of the International Board and Dominion officials continued to operate the control structures at the lake's outlets under the International Board's supervision. With the whole watershed in a state of flood, high inflows continued until lake level had risen to a maximum elevation of 1062·90 on June 1. Subsequent to this date the inflows gradually decreased and by maintaining maximum outflow rates lake level was gradually brought

down until it passed below elevation 1061·00 on August 15, and the regulation of the lake reverted to the Canadian Board. The rate of outflow was at once reduced but it was necessary to maintain a comparatively high rate of outflow throughout the remainder of the year in order to keep lake level below the upper storage limit and to provide a safety margin of storage capacity to handle possible high spring inflows. On March 31, 1928, lake level was at elevation 1060·10 and there was no indication of a recurrence of the excessive run-off conditions of the past year.

Throughout the fiscal year and especially during the flood period the board was indebted to the Department of Public Works for run-off records on Rainy and Namakan lakes, and to the Dominion Meteorological Service and the United States Meteorological Service for precipitation records at the numerous stations throughout the watershed.

In November the second stop-log winch was installed for the operation of the sluices in the southern end of the Norman dam, making possible the efficient control of level and outflow, in accord with treaty stipulations with the Government of the United States.

Water Power Regulations and Legal Research

While no new rights have been granted under the Dominion Water Power Regulations during the past year, several licences, based upon applications for water-power developments, have been prepared and are awaiting executive action.

The study of water-power administration as shown by provincial legislation and jurisprudence has been continued and a large amount of material collected and analysed. The scope of the inquiry has been extended to include interprovincial and international rights to the use of boundary waters.

British Columbia Administration

The waters in the Railway Belt of British Columbia are administered by the province in accordance with the Railway Belt Water Act, passed by the Parliament of Canada in 1912 and amended in 1913, 1926, and during the present (1928) session. The plan adopted by Parliament is that these waters are administered under the provincial laws so as to secure a uniform system of granting water privileges throughout the province.

The waters in the Railway Belt, however, together with the ungranted Crown lands therein, are public property of the Dominion, and for that reason the water privileges granted in the Railway Belt by the provincial authorities are examined in this department for the due protection of Dominion interests. Rights in Dominion lands required to be used or occupied in connection with grants of water are issued by the department in accordance with the Water Lands Regulations.

Applications for water rights required for the improvement of Indian reserves throughout the province of British Columbia are prepared by officers of this service, and surveys and investigations made in furtherance of those applications where necessary. Evidence in support of Indian claims to the use of water is also prepared and assistance given in connection with the hearing of such claims before the Board of Investigation under the Water Act.

Engineering Co-Operation With Department of Indian Affairs

At the request of the Department of Indian Affairs and under the direction of the District Chief Engineer at Winnipeg, repairs were made to the water supply system of the Sioux Lookout Indian school and a report prepared as to the condition of the sewage system at the MacIntosh Indian school, both in Ontario. In Manitoba, a report was prepared on the reclamation of marsh

areas in the Peguis Indian reserve, repairs made to the sewage system at Sandy Bay Indian school and the water supply system at the Fort Alexander school, also a report made on the water supply of the Guy school near Sturgeon Landing.

Under the direction of the Commissioner of Irrigation, plans and specifications were prepared for the water supply and sewage systems at the new Onion Lake school in Saskatchewan. Tenders have been called and it is expected that the work, to cost about $14,000, will be completed during the coming summer.

As in previous years, the local staff of the service in British Columbia have conducted a number of investigations and supervised the construction of important irrigation and other improvements in connection with Indian reserves, villages and schools. The investigations carried out numbered 28, of which 17 were for irrigation schemes and improvements; water supply, 8; electric lighting systems, 2; while one was in connection with erosion by stream flow. There were 27 separate construction projects under supervision of the local engineers of the service, not all of which were completed at the end of the fiscal year. Of these 17 were irrigation and storage projects, 7, water supply systems; 2, sewage disposal; and 1, electric lighting system. The total cost of these improvements was slightly over $32,000, which is small as compared with the benefits derived from them.

Further details as to this co-operative work will be found in the reports of the District Chief Engineers of the western provinces.

Water Resources Index Inventory

The Index Inventory system for recording and collating the water resources data of the Dominion has been in actual use for a number of years and has provided a most efficient method for the referencing, analysis, standardization, and filing of all data relating to the subject of water resources. A detailed description of the system has appeared in the Annual Report for 1916-17 and in the combined reports for the years 1917-18-19.

The system has been applied to practically all phases of the work carried on by the service, among the more outstanding of which may be mentioned the complete census of developed water-power, the analysis of central electric station activities, undeveloped water-power resources, stream measurement activities, and storage investigations.

This work has been largely carried on in co-operation with provincial organizations, notably the Hydro-Electric Power Commission of Ontario, the Quebec Streams Commission, the British Columbia Water Rights Branch, the Nova Scotia Power Commission, and the New Brunswick Electric Power Commission. The data compiled are being continually revised in accordance with the most up-to-date information and, resulting from a number of years of effort, a very large amount of information in standardized form is now available.

Water Power Resources of Canada

The estimates of the total capacity of developed and undeveloped water-power sites of the Dominion were revised during the fiscal year to conform with the latest data compiled in connection with the water resources inventory referred to in the last paragraph. These estimates place the capacity at 20,197,000 horse-power under conditions of ordinary minimum flow or 33,113,200 horse-power dependable for at least six months of the year. These figures are based upon rapids, falls, and power sites of which the actual existent drop or the head possible of concentration is definitely established, or at least well authenticated. In addition there are many rapids or cascades on various rivers and streams which are not as yet recorded and also many power concentrations possible on rivers of gradual gradient regarding which sufficient data

have not yet been secured to justify their inclusion in the estimates which, therefore, may be increased as further information becomes available. An analysis of the available power and the turbine installations at developed sites throughout the country indicates that in commercial practice installation is about 30 per cent in excess of the power ordinarily available for six months of the year and that this excess is even greater in some of the more modern plants. Taking the 30 per cent excess as the basis in this instance, the figure given above for the six months power available in Canada indicates that a turbine installation of 43,000,000 horse-power would be justified by the present recorded water-power resources.

On January 1, 1928, the total water-wheel and turbine installation throughout the Dominion amounted to 4,777,921 horse-power or only a little more than 11 per cent of the possible development. A very conservative estimate places the capital investment in the generation, transmission, and distribution at $875,000,000, a sum greater than that invested in any other single manufacturing industry in Canada.

An analysis of the utilization of the present installation indicates that

(1) 3,904,678 horse-power, or 81·7 per cent of the total, is installed in central electric stations for general public distribution.

(2) 528,731 horse-power, or 11·1 per cent, is installed in pulp and paper mills which, in addition, use power purchased from the central electric stations to the extent of approximately 775,000 horse-power.

(3) 344,512 horse-power, or 7·2 per cent, is installed in general industrial enterprise for electro-chemical reduction, manufacturing lumber, flour milling and other purposes.

The fact that the high average of 502 horse-power of hydraulic installation is available per 1,000 of population, is significant in an era when the industrial prosperity of a country is so closely linked with the amount of mechanical power available to its workers, and in this regard Canada occupies a most advantageous position amongst the countries of the world.

New installation during 1927 amounted to 221,655 horse-power, or a little less than during 1926. This figure gives no indication of the intense activity in hydro-electric construction during the year which will result in an additional installation of about 378,000 horse-power being completed by mid-summer of 1928, whilst other developments upon which construction has begun or is about to begin will, it is anticipated, increase the installation by a further 2,000,000 horse-power by the end of 1930.

Census of the Central Electric Station Industry

The development of the central electric station industry in Canada has been based almost solely upon the utilization of hydraulic power, the converse proposition that hydraulic development has been largely due to the progress of the central electric stations also holding good.

The close interconnection of these two outstanding factors in the development of Canada's natural resources and in the high standard of living of her citizens is at once made evident when it is stated that 81·7 per cent of the total hydraulic installation is in central electric stations while for several years past the electrical output of these hydraulically driven central stations has been in excess of 98 per cent of the total electricity distributed in Canada for public use.

The foregoing facts indicate the importance to this service of the frequent periodic revision of all basic data relating to the central electric station industry and this revision is accomplished through the medium of an annual census

inaugurated by the Dominion Water Power and Reclamation Service and conducted in co-operation with the Dominion Bureau of Statistics of the Department of Trade and Commerce.

The general statistics of this census are made available through annual reports issued by the Dominion Bureau of Statistics while at longer intervals a Directory of Central Electric Stations presenting a comprehensive review of the scope and character of all organizations, commercial or municipal, distributing electricity for sale, is published. The various aspects of personnel; capital invested; generating, transmitting and distributing equipment used; power generated, purchased and sold; blocks of power available for sale, rates and transportation facilities are presented in a form that renders the directory a valuable reference to the extensive financial and technical interests concerned with the industry.

The general statistical review of the tenth annual census, that for the calendar year 1926, has just appeared in preliminary form and will be followed shortly by the final report, while the third issue of the directory descriptive of conditions obtaining May 1, 1928, will issue shortly.

Dominion Hydrometric Survey

The Dominion Hydrometric Survey embraces stream measurement work throughout Canada. The records are brought together in one central agency, which attends to the compilation and dissemination of stream flow data and the survey operates efficiently both as regards office administration and field operations.

In the Prairie Provinces the work is the direct responsibility of the Dominion Government and in the other provinces the survey is carried on by the Dominion Government under co-operative agreements with the provinces concerned. The Dominion is divided into major drainage divisions, which together with the district office or offices in charge, are as follows: Pacific drainage, Vancouver; Arctic and Western Hudson Bay drainage, Calgary and Winnipeg; St. Lawrence and Southern Hudson Bay drainage, Ottawa and Montreal; Atlantic drainage, Halifax.

The uses to which the records are put are primarily in connection with water-power development and irrigation projects, and the rapid strides which have taken place in the hydro-electric field are due in no small part to the detailed and extensive records of the regimen of the numerous lakes and rivers of the country which have been made available, by the Dominion Hydrometric Survey, assisted by the voluntary co-operation of the provinces, of private corporations and of numerous individuals.

Run-Off Conditions in Canada.—As set forth in detail in the annual reports of the District Chief Engineers, the average run-off for the year has been generally above normal throughout the Dominion.

In the Pacific drainage typical stations showed a range in run-off for the year from 104 per cent of the long term mean in Capilano creek in the coast region to 148 per cent of the long term mean in the Kootenay river at Wardner.

In the Arctic and Western Hudson Bay drainage typical stations showed a range in run-off for the year from 106 per cent of the long term mean on the Peace river in northern Alberta to 353 per cent of the long term mean in Moosejaw creek in Saskatchewan. In southeastern Manitoba and in western Ontario, especially in the Winnipeg River watershed, maximum discharges for the period of record were experienced.

In the St. Lawrence and Southern Hudson Bay drainage typical stations showed a range in run-off for the year from 81 per cent of the long term mean in the north Maganatawan river in the North Bay district to 168 per cent of the long term mean in the Missinaibi river in northern Ontario.

In the Atlantic drainage typical stations showed a range in run-off for the year from 103 per cent of the long term mean in the Medway river in Nova Scotia, to 127 per cent of the long term mean in the Miramichi river in New Brunswick.

Power and Storage Investigations

Field studies in connection with power and storage investigations were carried on only where special circumstances warranted or upon the request of organizations receiving co-operative assistance from the service. Office studies were actively continued in the keeping up to date of the records of undeveloped and developed water-power resources throughout the Dominion.

In British Columbia an investigation and report was made for the Dominion Lands Branch of the department on an application for water-power privileges on the Indian river. Co-operation was maintained with the city of Vancouver in the matter of special studies relating to the investigation of nearby hydro-electric possibilities, also with the Greater Vancouver Water District in its investigations for a satisfactory water supply. The special studies of recent years in the headwaters of the Bridge river connected with hydro-electric development were also continued.

In Alberta an investigation and report were made in connection with an application by the Calgary Power Company for power privileges at the Ghost and Radnor sites on the Bow river. Inspections were made of a number of extensions made to the transmission system of the Calgary Power Company in the southern part of the province. An office study of the effect upon irrigation projects of storage for power purposes in the watershed of the Bow river was completed and a report made. Responsibility for the operations of the Lake Minnewanka storage during the filling season was again assumed by the department with satisfactory results.

In Manitoba inspections were made of the work carried on at Great falls on the Winnipeg river in the extension of the power station and appurtenant works of the Manitoba Power Company also of the work done by the city of Winnipeg on the same river in enlarging the channel at Eight Foot falls to improve tail water conditions at the Point du Bois station.

In Ontario field work was continued in connection with the Reference respecting Rainy and the Upper Boundary lakes now before the International Joint Commission. Information necessary to delimit the contours above the shore line of Namakan, Kabetogama, Sand Point, Crane, Little Vermilion lakes and Loon river was secured, completing and amplifying the work previously done on these lakes by the International Boundary Survey. Assistance was again afforded the International Lake Superior Board of Control in recalibrating the discharge through the dam at Sault Ste. Marie, and on the Niagara river studies were continued in close co-operation with the investigation being made by the Special International Niagara Board appointed to report upon the preservation of the scenic beauty of Niagara falls.

In Quebec special efforts were made to secure from all possible sources full data with regard to the developed and undeveloped water-powers of the province. The exhaustive list of Quebec water-powers compiled during the previous year and supplied to the Quebec Streams Commission for publication was revised and brought up to date.

In New Brunswick an examination of storage possibilities on the Tobique river was made in connection with the studies by the New Brunswick Electric Power Commission of the power available from the Meductic Rapids site on the St. John river.

In Prince Edward Island surveys were made on the south branch of the Montague river, following which a small hydro-electric plant was constructed by the Montague Electric Company.

In Nova Scotia storage studies were made in connection with the hydro-electric development of the town of Middleton and a power and storage survey commenced on the Herbert river at the request of the Nova Scotia Power Commission. Studies were also made of problems connected with the St. Margaret Bay system of the commission.

Irrigation

The season of 1927 was exceptional as regards intensity of rain and snowfall, particularly in the southern portions of the provinces of Alberta and Saskatchewan. As a natural consequence little water was required for irrigation. Due to these favourable conditions complaints which are usually numerous during the irrigation season materially decreased and, in fact, were almost negligible. The demand for the right to construct small dams to create storage for domestic and stock-watering purposes was reduced to a fraction of the customary number and emphasized the fact that ample precipitation had been received throughout the two provinces.

Field work in connection with the location of farmers' lateral ditches, although continued, was greatly reduced owing to the majority of farmers considering it unnecessary to supplement the already generous natural watering which their lands were receiving. Seepage and alkali studies and the classification of irrigable lands were continued throughout the season on the larger projects. Investigations were also carried on at the Brooks "Duty of Water" experiment station. New co-operative work was undertaken with the Seed Branch of the Department of Agriculture in connection with cereal, alfalfa and sweet clover seeds.

Sugar beet crops in areas tributary to the Raymond sugar factory again proved of great value to settlers on irrigated lands. In spite of most unfavourable harvesting conditions many heavy crops were dug and delivered to the factory at increased prices.

Considerable interest has been manifested by settlers in northern Alberta and Saskatchewan in the possibilities of utilizing the numerous bodies of surface water to raise fur bearing animals of various species. Many applications have been made to the provincial Governments at Winnipeg, Regina, and Edmonton for permission to engage in this profitable industry. Regulations have been framed with a view to leasing land and water areas to the provincial Governments who in turn sub-lease such areas to the applicants.

Water Administration

During the calendar year 1927, 51 applications were filed to use water under the Irrigation Act, a decrease of 26 from the previous year's total. Sixty-three licences were issued and there were at the end of the year 1,044 water licences in good standing, with 22 temporary permits, 223 authorizations and 202 schemes under investigation, excluding ice permits which are issued annually.

Inspection Work

The usual routine field work in connection with the administration of the Irrigation Act, consisting of the investigation of new applications which involve the making of surveys and the preparation of plans, and the inspection of operating projects was continued throughout the season in conjunction with canal and stream measurements and the study of losses in canals and reservoirs. The eleven field engineers engaged on this work inspected 298 established projects, investigated and surveyed 70 new projects and made 1,937 gaugings of stream and canal discharge. In addition one of the senior engineers made the usual annual inspection of all the large projects and irrigation districts.

General River Control

Many of the streams and lakes of Alberta, due to the abnormal precipitation, rose to extremely high stages, flooding low-lying lands, and in some cases causing considerable damage. Field investigations were, therefore, made in a number of cases where complaints were received. Investigations were made and reports prepared on the following: Sturgeon, Bow, Cascade and Highwood rivers and Wabamun lake.

The Canadian Pacific Railway Company's Irrigation Projects

Western Section.—The season being exceptionally favourable for crop growth and the rainfall for the growing season well over the average, only 1,273 acres were irrigated. The total cropped irrigable area was 203,000 acres producing crops valued at $5,090,100, based on the company's unit values, representing a per acre return of $25. One hundred and fifty thousand acres of this area were seeded to wheat and produced at the average rate of 30 bushels per acre. The live stock situation has shown little change from the previous season. The cropped area of the project, however, was increased by the breaking of some 15,400 acres of virgin land.

Eastern Section.—The area actually irrigated during the season was 7,921 acres, a considerable decrease as compared with the previous season. The total cropped irrigable area was 66,640 acres, which produced $1,821,680, based on the company's unit values, representing a per acre return of $27.30. The area in wheat was 31,967 acres producing 904,751 bushels, or at the rate of 28·3 bushels per acre. The season was most favourable for crop growth and very little irrigation water was used.

Lethbridge Section.—The area which received water during the season was 21,600 acres. The actual cropped area was 64,375 acres which produced values amounting to $2,147,767, based on the company's unit values, or equal to a per acre return of $33.36. The major crop was wheat which represented 47·5 per cent of the cropped area and produced an average yield of 32·3 bushels per acre. With the Magrath and Raymond irrigation districts now receiving water through the company's works, the irrigable area has been increased by 11,465 acres.

Taber Irrigation District

A change in content of this district has been authorized and 4,662 irrigable acres added to the system, bringing the total irrigable area to 21,600 acres. The area irrigated was only 576 acres, due to a very generous and well distributed rainfall. Unfortunately, weather conditions in the fall interfered with the threshing of grain and complete returns regarding yields are not available.

The sugar beet area was 1,630 acres, an increase of some 50 per cent over the previous season. The average yield was 8 tons per acre and the saccharine content averaged 17·8 per cent.

Canada Land and Irrigation Company

Important readjustments affecting the land areas and the financial situation of the company were sanctioned by the courts during the past year and additional funds were raised for further development work.

Owing to the wet season very little water was used, the total area actually irrigated being 700 acres. The average per acre return from the irrigated land, based on the company's unit values, was $29.66, while the gross value of produce and livestock shipped out during the year will, it has been estimated, exceed $500,000.

New West Irrigation District

Very little irrigation was practised or found necessary on this project during the past season. The total irrigable area is 4,501 acres of which only 151 acres were irrigated. The major crop was wheat, which represented some 58 per cent of the total irrigable area and yielded an average of 30·1 bushels per acre.

Lethbridge Northern Irrigation District

Although a much smaller area than usual was irrigated owing to favourable weather conditions, crop returns were quite satisfactory. The major crop was again wheat, an area of 60,161 acres yielding at the average rate of 33·7 bushels per acre. Weather conditions in the fall of the year were very unsatisfactory and serious delays were caused to threshing operations and the haulage of grain to elevators.

The Colonization Organization has again reported good progress and during the year 86 families were settled on the vacant lands. There are now 737 water users as compared with 646 in 1926.

During the season some 10,012 acres were irrigated. The total cropped area was 78,420 acres which produced crop values amounting to $2,700,185, according to the district's unit values, or representing a per acre return of $34.40.

United Irrigation District

In this district very little water was used for irrigation but a small stream was kept moving through the system during the entire season for domestic and stock watering use. Crops were below average due to the late seeding followed by cold wet weather which delayed ripening.

Magrath Irrigation District

Construction of the system was completed during the summer and water turned into the main canal for priming purposes on June 24. The total irrigable area is 6,970 acres, of which 1,235 acres were irrigated.

Raymond Irrigation District

No crop returns have been received from this district but it is situated in the heart of the beet-growing territory of southern Alberta and a large percentage of the irrigable land is devoted to this crop. The total irrigable area is 15,129 acres, of which 6,441 acres are served by the newly constructed works and the remainder are old agreement lands of the Alberta Railway and Irrigation Company, but are now operated by the district.

Mountain View Irrigation District

Authorization for the construction of the necessary works in connection with this district was issued on June 23, 1925. Plans for the major structures have been prepared and submitted to the district. These plans have not yet been filed by the district and no construction work has been undertaken during the past season

Alkali Test Plots at Maple Creek, Saskatchewan

Experimental plots have been under observation for the past six years to endeavour to obtain some reliable data regarding the effect of irrigation on heavy soils with high alkali content. Results to date indicate that alfalfa and cultivated grasses continue to produce heavy crops, while the wheat yield was only fair, due to extraneous causes. The alkali movement does not appear to be upward and as the general soil water movement is downward it is possible that the alkali salts are moving in the same direction. The experiments are being continued for a further period.

Duty of Water Investigations

The investigations continued at the Brooks "Duty of Water" Experiment Station during 1927 complete the ten-year program started in 1918. Crops included in the water requirement experiments in 1927 were wheat, oats, barley, corn, beans, alfalfa, peas, and sugar beets. Water requirements of these crops were observed in relation to number and depth of irrigations, stored moisture, and crop rotation. In addition the sugar beet crop was studied in relation to time of irrigation and seasonal use of water. The investigation on the effect of irrigation on the quality of wheat conducted in co-operation with the University of Alberta was continued at Brooks during 1927, and in addition some new co-operative work was undertaken with the Seed Branch of the federal Department of Agriculture in connection with cereal, alfalfa, and sweet clover seeds.

The season of 1927 was exceptional in respect to rainfall. The total for the six-month period April to September amounted to nearly 16 inches and actually exceeded the average for this period by 7·4 inches. The distribution was as follows: April, 2·13; May, 4·41; June, 3·76; July, 2·61; August, 1·09; and September, 1·74 inches. Past records show that not since 1915 have the moisture requirements of crops been so completely supplied by natural precipitation. As a result crops needed very little irrigation. Oats and alfalfa showed most benefit. Average yields of dry land and best irrigated plots are tabulated below. Irrigations required to produce maximum yields complete the table.

IRRIGATION EXPERIMENTS, 1927—AVERAGE YIELDS WITH AND WITHOUT IRRIGATION.

Crop	Average yield per acre		Irrigation required for highest average yields
	Without irrigation	With irrigation	
			inches
Wheat (bushels)	52·5	60·6	1–6
Oats (bushels)	50·3	110·7	1–6
Barley (bushels)	70·9	70·9	1–4
Beans (bushels)	28·5	28·8	1–4
Alfalfa (tons)	3.75	5·7	2–6
Sugar Beets—			
Beets (tons)	15·2	16·5	1–4
Sugar (pounds)	5,350	5,780	1–4

Yields were influenced more by fertility as affected by rotation than by the irrigations applied during 1927. It is to be remembered, however, that the high state of fertility obtained in the legume rotations depended directly upon irrigation during the preceding years of scanty rainfall.

The importance of legumes in the production of crops under irrigation is strikingly illustrated in the following table showing the average and maximum yields of wheat and sugar beets in the legume and non-legume rotations.

SUMMARY OF RESULTS FROM LEGUME AND NON-LEGUME ROTATIONS

Crop	Best legume rotation		Best non-legume rotation	
	Maximum	Average	Maximum	Average
Wheat (bushels)	69·0	60·0	44·3	41·5
Sugar beets—				
Beets (tons)	19·9	18·0	10·0	9·7
Sugar (pounds)	6,900	6,280	3,650	3,370

In the sugar beet time-of-irrigation experiments highest tonnage of beets and per cent sugar were obtained from irrigations applied early in July. The average monthly use of water by beets on dry land and plots which received one and two four-inch irrigations was as follows: May, 2·2; June, 4·4; July, 6·2; August 3·3; September, 1·2; and October, 1·4; a total of 18·7 inches.

A complete report of results of the irrigation experiments at Brooks in 1927 is contained in the separate report of this service.

Drainage Surveys and Investigations

The administration of the Dominion Drainage Regulations was again largely confined during the year 1927-28 to the development of smaller schemes. A striking example of the success of small scheme drainage might be cited in one case in the vicinity of Hay Lake, Alta., where a crop of Garnet wheat, grade No. 2, that averaged forty-six bushels to the acre, was harvested from land which only three years before formed the bed of a small lake. The department maintained supervision over the Waterhen Lake drainage project in Saskatchewan and the Western drainage project of the Manitoba Dairy Farms, Limited, in Manitoba, and kept in touch with provincial drainage development in the provinces of Saskatchewan and Alberta.

Small Projects

Eighty-eight small schemes were inspected, twenty-one applications dealt with, eight schemes authorized, ten sales of Dominion land made and seven applications cancelled. Owing to an exceptionally late spring and wet fall there was very little opportunity to construct drainage schemes or maintain the existing ditches with the result that many of the schemes authorized have not yet been completed. It is expected, however, that during 1928-29 better progress will be made and a number of new schemes constructed.

Provincial Drainage Projects

No new drainage districts were formed or petitioned for during the year 1927-28, but certain steps were taken toward the formation of a drainage district to carry out the works planned by this department some years ago for the reclamation of lands underlying and adjoining Big lake near St. Albert, Alta. Some work was carried out in connection with the drainage districts now in operation, but owing to the abnormal amount of precipitation during the year this was confined to the repair of ditches. Some of the lower lands in the districts were too wet for the growth of crops and freshets caused some of the ditches to cave in with the result that certain lands were flooded during a greater part of the year. Financially, however, all of the districts are reported to be in a sound condition.

In Saskatchewan, Drainage District No. 27, in the vicinity of Lewvan, was completed during the year and work was commenced on the Grand Coulee Drainage District. The enlargement and extension of Ditch No. 2 in the Riceton Bechard Drainage District was also undertaken at an estimated cost of $22,000.

Waterhen Lake Drainage Project

The late and wet season made it impossible to carry out any experimental work in connection with the test plots which have been maintained for a number of years on the project. Crops sown by the lessees of the Dominion land in the project also suffered due to the wet condition of the lake bed. Some sixty acres of wheat, however, sown by the lessees yielded a fair crop. Cultivated hay crops, such as timothy, bromus, red top, sweet clover, and western rye grass, grew luxuriantly with good returns.

Manitoba Dairy Farms Limited—Western Project

In connection with the Dominion land leased by the company in townships 4 and 5, range 9, E.P.M., under condition of drainage, a ditch 9 miles long, 6 feet in width at the base and 18 feet at the surface, and 6 feet deep, was constructed. The excavating was done by a 'walking' dredge which straddled the ditch. A motor road is being constructed on one side of the ditch, the excavated material being utilized for this purpose.

Manitoba Dairy Farms Limited—Eastern Project

A reconnaissance investigation was made of this company's proposed drainage scheme in townships 1-11, ranges 9-17, E.P.M., to determine its feasibility and durability. The data secured are being studied and a full report thereon will be submitted to the department at an early date.

V

NORTH WEST TERRITORIES AND YUKON

REPORT OF THE DIRECTOR, O. S. FINNIE

All matters, with the exception of mining, pertaining to the Department of the Interior, having to do with the Northwest Territories and the Yukon are under the control of this branch, and in addition there is the inspection work done by the mining and petroleum engineers in the Prairie Provinces, the Railway Belt of British Columbia, and the Northwest Territories.

NORTHWEST TERRITORIES

General.—There has been a continued steady development in all lines of endeavour in the Northwest Territories. The staple industry, the fur trade, has been generally good. There has been also a marked increase in prospecting, requiring surveys both by land and air. Investigations have been conducted not only in the interior but along the coasts and islands from the eastern to the western Arctic, including Hudson and James bays. There are many indications of marked improvement in native conditions.

Northwest Territories Council.—There was a session of the Northwest Territories Council which opened on Wednesday, the 28th December, 1927, in the office of the Commissioner, W. W. Cory, C.M.G., at Ottawa. All members of the council were present. In addition to a large amount of routine business, the council amended the Judicature Ordinance by increasing the powers of the public administrator to administer intestate estates not exceeding $250 in value. Through this amendment the public administrator was empowered to administer some thirty-four estates of half-breeds entitled to $240 each in lieu of script on the extinguishment of the Indian title. The Commissioner was authorized to accept the conventions made between the United Kingdom and France, Belgium, and Czechoslovakia relative to legal proceedings in civil and commercial matters. The composition of the council is as follows:—

Commissioner—W. W. Cory, C.M.G.

Deputy Commissioner—Roy Alexander Gibson.

Councillors—Charles Camsell, Oswald Sterling Finnie, John Wesley Greenway, Henry Howard Rowatt, Cortlandt Starnes.

Scientists and Explorers.—Under the provisions of the Scientists and Explorers' Ordinance sixty-one licences were issued during the year, permitting scientists to conduct investigations and explorations in the Northwest Territories.

Exploration and Patrol.—Several patrols were made by officers of this branch into the Northwest Territories for the purpose of collecting and assembling all possible information on the resources and nature of the country, as well as the health and well-being of the native population.

Mr. George P. Mackenzie again commanded the Annual Expedition to the Eastern Arctic on the ss. *Beothic.* Dr. F. H. Banting, of the University of Toronto, and Mr. A. Y. Jackson, R.C.A., also of Toronto, accompanied the expedition. Eight members of the Royal Canadian Mounted Police, including Inspector C. E. Wilcox, were taken north to various detachments and eight other members, who had been relieved, returned on the ship. Inspector Wilcox was left at the Pond Inlet detachment.

The Expedition left North Sydney, N.S., on July 16, 1927, the first port of call being Godhavn, Greenland, which was reached on July 23. Here the members of the expedition were entertained by the Governor and the Greenland Parliament, then in session.

After leaving Godhavn, Baffin bay was crossed without more than ordinary difficulty, but, as an unbroken ice field was encountered about twenty-five miles from Pond Inlet, it was decided not to attempt to reach this post until the return voyage. Dundas Harbour, Devon island, was reached July 27, Craig Harbour, Ellesmere island, on July 29, Etah, north Greenland, on July 30, Fram Havn, Ellesmere island, on July 31, and Bache Peninsula, the most northerly post, was reached the same day.

From here the ship was headed south and Craig Harbour was reached on August 2; Dundas Harbour, Devon island, on August 3; Beachy island, Lancaster sound, on August 4; Port Leopold, Somerset island, on August 8; Arctic Bay, Admiralty inlet, on August 12; Pond Inlet, Baffin island, on August 14; River Clyde on August 18; Pangnirtung on August 21; Lake Harbour on August 25; Wakeham Bay, Hudson Straits, on August 29; Port Burwell on August 30, and the expedition returned to North Sydney on September 5.

All the purposes of the expedition were fully accomplished. The ice conditions south of River Clyde were exceptionally favourable. North of that port conditions were about normal for these high latitudes, but the voyage was a particularly trying one on the navigating officers because of the almost continual dense fog prevailing, no previous expedition having encountered anything like it.

Dr. L. J. Weeks and Mr. M. D. Haycock, of the Geological Survey, Department of Mines, who had spent the year in the interests of their department working in Pangnirtung district, Cumberland sound, returned on the ship.

Dr. L. D. Livingstone, the medical officer, also came out with the 1927 expedition, having spent the previous year on Baffin island. During this period he checked an epidemic of chicken-pox which had broken out among the natives. On February 14, 1927, a patrol was commenced via Sinayah, Frobisher bay, Hudson strait and Lake Harbour to Amadjuak. The land route was then taken by Amadjuak lake and thence followed a large river flowing north running into Nettilling fiord. Five hundred natives were visited and very little sickness found. The trip lasted fifty-two days.

On April 25, another trip was made with a native, Ookoojoak, via Kingnait fiord to Pond Inlet, visiting and treating sick natives at Padle and other camps on the way. Pond Inlet was reached on June 5, after covering 1,028 miles in forty-two days, although, owing to bad going, eight dogs were lost. The trip was continued on June 25 to Milne Inlet and Navy Board Inlet where two families were visited. Bylot island was visited and Pond Inlet was again reached on July 3, where Dr. Livingstone was picked up by the ss. *Beothic* and returned to headquarters.

Major L. T. Burwash, who left Ottawa on July 2, 1927, returned in September of the same year from a reconnaissance survey of the economic conditions of the Eskimo and an examination of the country on the eastern coast of Hudson and James bays, between Rupert House and Richmond gulf. The Belcher and other islands lying off these coast lines were also visited and the conditions of the native population investigated.

Mr. J. A. McDougal, District Agent at Fort Smith, made an inspection of the district from Fort Smith to Cambridge Bay, investigating and reporting on all matters pertaining to the welfare of the Eskimo in the western Arctic.

Mr. W. H. B. Hoare, one of the Branch's investigators, left Ottawa in January, 1928, to make an inspection of the wild life in the Thelon game

sanctuary, an area referred to under "Parks and Preserves" in a later portion of this report. He took with him six Husky dogs brought down from the eastern Arctic for patrol work on the Arctic prairies. This work will continue until the fall of 1929.

Messrs. A. E. and R. T. Porsild, brothers, made an investigation of the area between the Mackenzie and Anderson rivers, comprising some 15,000 square miles, and reported that the grazing grounds in that district compare favourably with those found in Alaska and would support 150,000 reindeer.

They are to continue their work in 1928 and will make an inspection of the area to the north and east of Great Bear lake. They will return to Ottawa in the fall of 1928 and submit a final report on the advisability of introducing reindeer into the northern area of the Mackenzie District.

Of the patrols carried out by the Royal Canadian Mounted Police during the last year, among the most noteworthy were Staff-Sergeant Joyce's patrol from Bache Peninsula, Ellesmere island, to King Christian island, when several herds of musk-ox and caribou were observed; and Corporal Walters' patrol from Fort Smith northeast to the Taltson river which provided material for the addition of valuable information to the maps of that district.

Eskimo Affairs.—Steps were taken by Order in Council to transfer the control of Eskimo affairs from the Department of Indian Affairs to the Commissioner of the Northwest Territories, Department of the Interior. By mutual consent of the departments concerned this transfer did not become effective until March 31, 1928.

Lands.—Seven applications for land were received and six patents were issued covering five acres.

Hospitals.—The sum of $10,778.58 was paid during the year to the hospitals at Fort Smith, Resolution, Hay River, Simpson and Aklavik for medicines and for the maintenance and treatment of patients on the basis of 50 cents per diem for all patients treated and $1.50 per diem additional for indigent whites and half-breeds. The details are as follows:—

Eskimo, Indians and half-breeds—	
Total number of days treated, 14,189, at 50c per diem.....	$ 7,094 50
Pay patients—	
Total number of days treated, 1,010, at 50c per diem.....	505 00
Indigent whites and half-breeds—	
Total number of days treated, 1,541, at 50c. plus $1.50 per diem	3,082 00
Mental patients, Ponoka, Alta.....	95 00
Medical supplies, etc.....	2 08
Total	$10,778 58

Health.—The general health of the population (white, Eskimos and Indians) has been good on the whole and there were no serious epidemics during the year.

Education.—Schools were conducted by different missions at Fort Smith, Resolution, Hay River, Providence, Simpson, Norman, McPherson and Aklavik. The sum of $1,800 was expended for their assistance. During the year the Church of England school at Hay River received a grant of $655 for the maintenance of destitute children and the Roman Catholic school at Resolution received $1,005 for the same purpose.

Liquor Permits.—The annual return made before Parliament, in accordance with section 88, chapter 62, R.S.C. 1906, shows that 266 permits to import liquor for medicinal purposes covering 534 gallons were issued during the year.

Parks and Preserves

Protection of Buffalo.—During the past year the warden service was increased from ten to twelve men in order to continue efficiently the patrol service of the Wood Buffalo park which has been extended in area and now supports a greatly increased number of animals. Latest reports indicate that the wood buffalo in the southern range are intermixing with the plains buffalo shipped from the Wainwright park and the different herds are in excellent condition, each herd containing several calves. The Treaty Indians who are authorized to hunt and trap other animals in the park, subject to the provisions of the park regulations, co-operate with the game wardens and render considerable assistance in connection with the protection of the buffalo.

Permits to take buffalo for scientific purposes were issued to Dr. R. M. Anderson, of the National Museum of Canada, and Dr. Seymour Hadwen, of the University of Saskatchewan.

Transfer of Plains Buffalo.—A total of 1,934 buffalo were received at the Wood Buffalo park from Wainwright in 1927, which brings the total number of animals received from Wainwright during the past three years to 5,568.

Wood Buffalo Park.—A telephone line was constructed between Fort Smith and the base camp in the Wood Buffalo park, a distance of forty-six miles. This is a valuable improvement and of great assistance to the superintendent in that it enables him to keep in touch with the warden service at all times. A fire tower was also constructed at the buffalo landing and fourteen miles of road graded. Only two minor offences were reported on the part of the Indians and half-breeds who were permitted to hunt and trap in the park. One hundred and thirty-two such permits were issued during the year and the value of the fur taken by the permittees was approximately $40,000.

Musk-Ox.—During the past year the Thelon game sanctuary comprising some 15,000 square miles, which embraces a portion of the natural habitat of the musk-ox, was set aside as a preserve for the musk-ox and other forms of wild life. A few years ago our investigators reported the presence of two small herds of musk-ox in the district adjacent to the junction of the Thelon and Hanbury rivers, which location is almost in the centre of the sanctuary. It is expected that the musk-ox will thrive and multiply in this natural habitat where they will be accorded complete protection under the provisions of the Northwest Game Act.

Caribou.—Efforts are being continued to educate the natives to the necessity of conserving this animal and to the inevitable results should wanton slaughter be renewed. The regulation prohibiting the export of caribou skins resulted in a marked decrease in the number of skins traded during the licence year for which records are now presented. The figures are:

1925-26	2,332
1926-27	292
A decrease of	2,040 skins

Beaver.—This animal has been trapped extensively of late years and, in accordance with the recommendations of our game officers, a close season has been declared on beaver in the Mackenzie District for a period of three years from October 1, 1928.

Destruction of Predatory Animals.—The amount paid in wolf bounties during the last year was $29,220, a total of 974 wolves being secured. The bounty is paid on condition that the pelts be surrendered to the department and the sum of $23,364.25 was realized from the sale of wolf pelts, the net cost to the Department being less than $10 per wolf killed, whereas, prior to 1924, bounty was paid at the rate of $20 for each wolf killed and the pelt was not surrendered. The present system of bounty payments is working very satisfactorily.

ADMINISTRATION OF THE NORTHWEST GAME ACT

Revenue.—The revenue collected was as follows:—

Hunting licences	$15,332 00
Trading licences	4,095 00
Bird licences	25 00
Sale of wolf pelts	23,364 25
Fines for violation of the Northwest Game Act	225 00
Sale of confiscated pelts	280 71
Trading post permit fees	160 00
Total	$43,481 96

This is an increase of $9,286.46 over the amount received during the previous year.

Licences.—Returns of licences under the Northwest Game Act for the year 1926-27 were received during the fiscal year 1927-28, as follows:—

Hunting.—Resident, 312; non-resident, British, 122; non-resident, alien, 45.

Trading.—Resident, 162; non-resident, British, 8; non-resident, alien, 8.

Bird Licences.—5.

The revenue received in payment for these licences was $19,452, a reduction from last year of $2,189.

Convictions.—There were ten convictions for violation of the Northwest Game Act as compared with twenty-one last year.

Permits.—Thirty-two permits were issued without charge to scientists and others to take specimens of game animals for scientific and propagation purposes.

Twenty-eight Migratory Bird Permits were counter-signed to be operative in the Northwest Territories.

AMENDMENTS TO THE NORTHWEST GAME REGULATIONS

Amendments have been made to the Northwest Game Regulations during the fiscal year in relation to the following matters:—

(1) The creation of the Thelon Game Sanctuary.

(2) The authorization of a close season on beaver in the Mackenzie District for a period of three years commencing the 1st October, 1928.

Statement of Game and Fur-Bearing Animals Taken and of Pelts Traded Under the Northwest Game Act, 1926-27

—	Taken	Traded
Fur-bearers—		
Otter	63	210
Beaver	1,243	8,815
Marten	1,393	10,591
Fisher	17	179
Mink	1,045	4,943
Muskrat	15,259	130,273
Fox white	5,294	35,590
" blue	138	257
" red	920	3,752
" silver	65	254
" cross	340	1,397
" not specified	18	11
Wolf	187	318
Wolverine	87	216
Coyote	120	214
Lynx	1,182	3,220
Skunk	104	492
Ermine	836	4,165
Bear white	48	114
" black	59	254
" grizzly	1	7
" not specified	..	9
Big Game—		
Moose	98	48
Caribou	416	292
Mountain Sheep	2	12
Protected Birds—		
Ptarmigan	622	
Grouse	468	
Prairie Chicken	39	
Wild Goose	93	
Duck	810	

The total value of the furs traded is estimated at approximately $2,928,250, an increase of $1,148,900 over the estimated value for the previous year.

Yukon

Lands.—Nine applications for land were received and eighteen patents issued covering seven hundred and twenty-five acres.

Timber.—The details of the timber business for the fiscal year were as follows:—

Permits to cut wood and timber	62
Timber cut under permits	155,678 feet board measure
Wood cut under permits	7,646 cords
Wood cut on timber berths on which dues were paid	11 cords
Wood cut without authority of permit on which seizure dues were paid	1,482 cords

Coal.—The Five Fingers Coal Company operated their mine at Tantalus, Butte, during the year and shipped a considerable tonnage to Dawson.

Agriculture.—The season of 1927 was very favourable and the well matured crops were of an excellent quality.

Hospitals and Public Health.—The hospitals at Whitehorse, Dawson and Mayo have given splendid service. The number of old persons, both men and women, who have to be given assistance, is still a problem and their maintenance is a heavy drag on the finances of the Territory.

Education.—The school situation remains somewhat the same as the previous year. Public and High Schools were maintained at Dawson, Whitehorse, Mayo, Keno and Carcross. There are no assisted schools in the Territory at the present time.

Game.—Big game is reported as being plentiful. Wolves and coyotes were reported to be on the increase. Several parties of big game hunters were again in the Territory during the past year and all express themselves as being well satisfied with the results of their hunts.

Law and Order.—The Royal Canadian Mounted Police have made frequent patrols to outlying districts as in the past and law and order has been well maintained throughout the Territory.

Yukon Council.—The Yukon Council assembled on May 9, and prorogued on June 7. Amendments were made to the existing ordinances, and ordinances were passed respecting aeroplane transportation in Yukon and also empowering the Gold Commissioner to enter into negotiations with the Federal Government with a view of putting into effect the Act respecting Old Age Pensions.

During the absence through illness of Mr. Percy Bearisto Reid, the Gold Commissioner, and later owing to the vacancy caused by his death, Mr. George Allen Jeckell, Comptroller of the Territory, was appointed Acting Gold Commissioner for the remainder of the fiscal year.

Mining, Petroleum, and Natural Gas Supervision

COAL MINING IN ALBERTA

Good conditions have prevailed at the majority of the coal mines in this province resulting in a larger output than during the preceding year.

One feature in the domestic field has been the acceptance of Alberta coals on the Pacific Coast cities where the coals have won favour owing to their freedom from soot. Future trade for Alberta coals in British Columbia and the adjacent State of Washington would appear to look brighter, particularly as the suitability of these coals for domestic consumption is being more widely recognized by the consumers in these areas.

As far as possible inspections have been carried out systematically for the purpose of checking up the quantities of coal reported as mined from the various areas, and where required underground and surface surveys have been made to determine the correctness of the plans of the underground workings supplied by the operators.

The staff of the Calgary office have been called upon to assist the Department of Justice in actions against operators for non-compliance with the Coal Mining Regulations and infractions of the Railway Act in relation to barriers required to be left to protect railways.

Steam Coal Mines

Crowsnest Area.—The disastrous explosion which closed down the mine of the McGillivray Creek Coal and Coke Company on November 23, 1926, was investigated by the Hon. Chief Justice Horace Harvey of the Supreme Court of Alberta. Since this explosion a regulation has been passed requiring that rock dusting be carried out at gaseous mines so as to minimize the result of coal mine explosions. This mine has been reopened and again brought into production.

Brazeau-Mountain Park Area.—Mines in this area have worked fairly regularly throughout the year.

Domestic Coal Mines

Lethbridge-Taber Field.—The mines in this area have been kept busy during the year with the exception of some of the smaller mines which have only worked spasmodically. A new shaft has been sunk by the C. S. Donaldson Coal Company in section 30, township 10, range 21, west of the 4th meridian, on the Kipp-Retlaw extension of the Canadian Pacific Railway, and it is proposed to install a plant at this point to develop the Lethbridge seam which was found to underlie this area.

Operations at the Leland mine, Taber, formerly the Canada West Coal Company, have been continued during the year with an increased production.

Drumheller-Carbon-Willow Creek Area.—Prospecting with the diamond drill has shown that workable coal seams exist in the vicinity of Munson but under much deeper cover than in the valley of the Red Deer river. It is probable that this area will receive further attention from operators at an early date.

In the Carbon field, the major output is obtained from the Stopp mine of the Peerless Carbon Coal Company and the Oliphant mine. The mine formerly operated by the Carbon Coal Company has been reorganized and is now operated by the Fox Coal Company. The extension of the power line from the Union Power Company's plant at Drumheller to the Carbon district has supplied these smaller operators with power at a lower cost and will thereby enable them to operate more successfully than in the past.

The construction of the branch railway from Rosedale southerly, along the Red Deer river, to the Canadian Pacific Railway at Rosemary, will provide transportation for development of the Willow Creek area, a southeasterly extension of the Drumheller coal field. It is hoped that this railway will be open for traffic during the fall of 1928. Various companies, holding leases under the Dominion Coal Mining Regulations, have been carrying out prospecting by means of core drilling and prospect tunnels from the outcrop. Spur tracks and mining plants are being installed at sites selected by the Murray Collieries Limited, Atlas Coal Company, and Albion Coal Company. It is also proposed to proceed with development, at an early date, at the Murray, Murphy, and Sharpe lease and the Willow Creek Coal Company's property. This branch line will also give an additional outlet for the coal mines in the vicinity of Drumheller and Wayne.

Three Hills-Ardley Field.—Prospecting has been carried out by means of core drilling in the vicinity of Three Hills, and it was found that the seam worked by the Pallisade Coal Company extends easterly beyond the town. No further development work has taken place in this area. The Carbondale Coal Company's mine at Ardley was reopened during the year.

Saunders Area.—The West Saunders Coal Company's mine was closed during the year. Additional mining equipment has been installed at the plants of the Bighorn and Saunders Creek collieries and Alexo Coal Company.

Coalspur-Lovett Area.—The mine formerly operated as the Oliphant-Munson Collieries was reopened as the Coalspur Collieries, Limited. New spur tracks and mining plant have been installed and the original entries cleaned up and the underground workings extended.

The Superba Coal Company, Limited, have opened a new mine in section 2, township 47, range 19, west of the 5th meridian on the southerly extension of the Lovett coal seams. The main line of the Alberta Coal Branch of the Canadian National Railways was extended to the site; mine sidings and complete mining plant installed. A considerable amount of surface prospecting has been carried out during the year in the vicinity of Bliss on the Canadian National

Railways in township 51, range 24, west of the 5th meridian, in order to locate the northerly extension of the Coalspur series of coal seams in that vicinity. It is proposed to do further prospecting by means of core drills owing to the thick mantle of glacial deposit overlying the strata in this locality.

Wabamun-Pembina Area.—The fire, which it was felt was satisfactorily sealed off at the Lakeside mine, Wabamun, unfortunately worked through the coal seam on to the main entry and necessitated the closing of the mine. New entries are now being driven with the object of developing the virgin areas and eventually passing around the old workings to recover the pillar coal which remained undrawn at the time of sealing up the mine.

SASKATCHEWAN MINING

Coal

The number of mines operating on Dominion lands during the year averaged sixty-seven, some mines being abandoned and others being opened. Ninety-four regular mine inspections were made and reported on, and thirty-four mines were surveyed. Apart from these inspections, many visits were made for the purpose of giving advice in regard to mining operations.

Employment in mines was, as usual, irregular during the spring and summer months. Good relations prevailed between operators and miners. There has been no fatal or serious accident in any mine operating on Dominion lands during the year. Two cases of illegal mining were reported, but both parties took out leases covering the areas concerned.

The table which follows is divided into three classes showing the output during the calendar year 1927 of coal from Dominion lands subject to royalty, coal subject to royalty taken from School lands, and coal produced not subject to royalty:—

Province	Output subject to royalty		Not subject to royalty	Total
	Dominion lands	School lands		
	tons	tons	tons	tons
Alberta	4,039,431	142,990	2,754,359	6,936 780
Saskatchewan	119,684	11,299	341,199	472,182

The table hereunder shows the number of mines operating in Alberta and Saskatchewan subject to royalty, and those not subject to royalty, also the total number of mines operated during the year 1927:—

Province	Number of operating coal mines subject to royalty		Not subject to royalty	Total
	Dominion lands	School lands		
Alberta	187	15	57	259
Saskatchewan	61	7	13	81

Sodium Sulphate

Three inspections were made of sodium sulphate deposits, taken up as mineral claims, and for the purpose of valuing improvements.

PETROLEUM AND NATURAL GAS

The impetus given to the prospecting for oil and gas in Western Canada by the production of naphtha laden gas from the Royalite Oil Company's No. 4 Well has led to steadily increasing developments.

In Turner valley the Royalite Oil Company have erected a derrick on their seventeenth location and have prepared for a large drilling program in addition to the increased activities of several of the other companies. The wells now drilled have furnished a great many valuable data for the further development of the field and the encountering of the naphtha laden gas in every well which has been drilled into the Royalite dolomite clearly shows that the original strike in Royalite No. 4 was not a 'pocket.'

In the other areas of Western Canada the most important development was the encountering of production of oil in the Ellis formation at the Devenish Well near Skiff in southern Alberta, which opens up great possibilities over a wide area and considerable further prospecting will be carried on in this locality during the coming season.

In addition to the production obtained during the year a very important feature is the large amount of detailed geological work which is being carried on, aided, in many cases, by the drilling of shallow test holes to determine the complex structure of the foot-hills or the masked structure of the plains which is generally covered with a mantle of glacial drift.

A summary of the operations in Western Canada follows and is concluded by a tabulated statement of the results obtained.

Alberta

Lesser Slave Lake Area

International Petroleums Ltd.—Drilled a well on section 14, township 74, range 4, west of the 5th meridian to a depth of 2,845 feet encountering some showings of gas and oil but not in commercial quantities. The well was, therefore, abandoned and preparations are being made to drill a second hole on section 30, township 75, range 6, west of the 5th meridian.

Athabasca River Area

Drilling was carried on by the International Bitumen Company, Limited, on section 32, township 96, range 10, west of the 4th meridian in the bituminous sand region.

Considerable work was carried on by the Bituminous Sand Extraction Company leading to the recovery of the bitumen from the tar sands, and one well was drilled on section 24, township 88, range 8, west of the 4th meridian, to a depth of 350 feet.

Viking Area

Two new wells drilled by the Northwestern Utilities Limited in the Viking field during the summer encountered a gas flow of nearly 14,000,000 cubic feet which augmented the reserve supply of gas for the city of Edmonton. No. 13 was drilled on legal subdivision 13, of section 4, in township 49, range 12, west of the 4th meridian and No. 14 on legal subdivision 4, of section 4, in township 49, range 12, west of the 4th meridian.

Irma—Fabyan Area

No drilling was carried on during the year.

Gas was supplied to Wainwright from the Maple Leaf No. 1 Well, located on legal subdivision 1, of section 24, in township 45, range 8, west of the 4th meridian.

Wainwright Area

The National Exploration Company's Well.—L.S. 1, section 30, township 45, range 6, west of the 4th meridian. This well encountered a flow of gas amounting to 14,000,000 cubic feet at a depth of 2,237 feet. Drilling was carried somewhat further but the well was not completed.

British Wainwright Oil Company.—L. S. 4, section 22, township 45, range 6, west of the 4th meridian. This well was drilled to 2,238 feet and 8¼-inch casing set but was not completed.

Edmonton-Wainwright Oils Limited No. 1.—L. S. 4, section 29, township 45, range 6, west of the 4th meridian.

British Petroleums Limited No. 3B.—L. S. 4, section 29, township 45, range 6, west of the 4th meridian.

Production of oil was obtained from these wells during the year and treated in a refining plant erected near the wells by the Absher Syndicate.

Mid Canada Oil and Gas Company.—Section 35, township 45, range 6, west of the 4th meridian. This company erected a derrick and 'spudded in' on the above location but operations were suspended before the well was carried to depth.

Western Consolidated No. 2.—Section 30, township 45, range 6, west of the 4th meridian. The well was abandoned and plugged.

Interior Oil Co. Limited No. 1.—Section 36, township 44, range 7, west of the 4th meridian. Was drilled to 2,000 feet when operations were suspended. It is expected that the well will, in the spring, be carried to the horizons in which oil was found in the British Petroleums and Edmonton Wainwright wells this season.

Ribstone Area

Ribstone Oils Limited No. 1.—L. S. 1, section 1, township 46, range 1, west of the 4th meridian. This well has been carried to a depth of 1,956 feet where a heavy flow of water was encountered. The crew are endeavouring to shut off this water before drilling further.

Imperial Oil Co., Ribstone No. 1.—Section 5, township 45, range 1, west of the 4th meridian. The well was abandoned at a depth of 3,490 feet and plugged back so as to produce the gas encountered at a depth of 1,350 feet. The gas, at the present time, is shut in for lack of market.

Advance Oil Company Ltd. No. 3.—L.S. 1, section 16, township 45, range 1, west of the 4th meridian. Drilling was carried to a depth of 308 feet. Operations have been suspended for some time.

London Ribstone Petroleums No. 1.—L.S. 14, section 10, township 43, range 3, west of the 4th meridian. This well was carried to a depth of 1,500 feet when drilling was suspended in the fall.

Suffield Area

Ontario-Alberta Oil Development Co., Ltd.—Section 33, township 16, range 8, west of the 4th meridian. A derrick is being erected on the above location.

Medicine Hat Field

The Ogilvie Milling Company.—L.S. 9, section 30, township 12, range 5, west of the 4th meridian. Drilled a well to the main producing sand, encountering a good flow of gas; otherwise no drilling was done in the field during the season. Some repair work was done.

The city of Medicine Hat has planned an extensive campaign of repair work for its wells this season.

Redcliff Field

The Roth and Faurot Well.—L.S. 9, section 8, township 13, range 6, west of the 4th meridian. Was carried to a depth of 3,145 feet where drilling ceased and the well was plugged back to the gas sand at 1,252 feet.

The Redcliff Pressed Brick Company.—Section 9, township 13, range 6, west of the 4th meridian. Drilled a well to the gas sand at 1,166 to 1,190 feet securing an open flow of 2,500,000 cubic feet per day.

Cypress Hills Area

Eagle Butte Oil Company, Limited.—L.S. 3, section 31, township 7, range 4, west of the 4th meridian. Commenced drilling on the above location late in the fall. Operations were suspended for the winter at a depth of 1,000 feet but have been resumed recently.

Skiff Field

An important development in the Prairie area was the discovery of oil in a well drilled by the Devenish Petroleums Limited on L.S. 5, section 27, township 5, range 14, west of the 4th meridian, at a depth of 3,182 feet. The oil has a specific gravity of 18·4° Be. and appeared to be in good quantity although, on account of difficulty experienced in shutting off lower water, no large production has been obtained.

The Devenish Petroleums and Imperial Oils Limited are co-operating to drill other test wells in the vicinity, the first one to be on L.S. 11, section 11, township 5, range 14, west of the 4th meridian.

Barnwell Field

The Canadian Western Natural Gas, Light, Heat and Power Company have carried on extensive structure drilling in this area during the winter.

Chin Coulee Field

Lethalta Oils Limited—L.S. 5, section 33, township 8, range 18, west of the 4th meridian. A derrick is being erected in preparation for drilling a well on the above location.

Bow Island Field

The Imperial Oil Company's test well on section 8, township 11, range 11, west of the 4th meridian, was abandoned at a depth of 3,950 feet.

Warner Area

The Gas Production & Transportation Ltd—Are drilling on L.S. 14, section 21, township 4, range 18, west of the 4th meridian, having reached a depth of 3,350 feet at the end of the year.

Pincher Creek Area

Alberta Gas & Fuel Co. Limited.—L. S. 3, section 34, township 2, range 29, west of the 4th meridian. This company is drilling on the above location, having reached a depth of about 2,000 feet at the end of March.

Mount Royal Oil Co. Ltd. No. 1.—L. S. 3, section 7, township 6, range 1, west of the 5th meridian. Operations were suspended for the winter at a depth of 1,000 feet. Several good showings of gas were encountered.

Gleichen Area

Oil Producers Corporation of Canada, Ltd.—L. S. 4, section 24, township 22, range 23, west of the 4th meridian. This company has erected a derrick on the above location near the town of Gleichen but has not, as yet, commenced drilling.

Rice Creek Area

Imperial Oil Co. Ltd. Rice Creek.—L. S. 13, section 4, township 14, range 2, west of the 5th meridian. This well was abandoned at a depth of 5,747 feet.

Highwood Area

Imperial Oil Co. Ltd. Highwood No. 1.—L. S. 3, section 36, township 18, range 3, west of the 5th meridian. Operations were suspended at a depth of 3,624 feet. It is expected that drilling will be continued with a diamond drill.

Aldersyde Area

Ranchmen's Gas and Oil Co. No. 1.—L. S. 16, section 13, township 20, range 29, west of the 4th meridian. This company is drilling at a depth of about 2,500 feet.

De Winton Area

Anglesey Lakeview No. 1.—L. S. 1, section 22, township 21, range 1, west of the 5th meridian. Operations have been carried to a depth of over 2,700 feet with drilling in progress.

Moose Mountain District

Imperial Oil Co. Ltd. Bow River No. 1.—L. S. 15, section 12, township 25, range 5, west of the 5th meridian. This well was abandoned at a depth of 5,585 feet.

Signal Hill Oil Company No. 2.—L. S. 9, section 34, township 23, range 5, west of the 5th meridian. Drilling has been carried to a depth of 1,950 feet and is in progress.

Morley Reserve

Gold Coin Oils.—Operations were suspended at a depth of 3,928 feet.

Wabash Oils Ltd. No. 1.—This company is drilling at a depth of 1,100 feet.

Turner Valley

Advance Oil Co. Ltd. No. 5.—L. S. 16, section 19, townshipe 19, range 2, west of the 5th meridian. Drilling was started on March 8.

Big Chief Oil Co. Ltd. No. 1.—L. S. 4, section 5, townshipe 20, range 3, west of the 5th meridian. Drilling suspended at 4,370 feet.

British Dominion Oil & Development Co. No. 1.—L. S. 4, section 5, township 20, range 2, west of the 5th meridian. This well was drilled to a depth of 6,600 feet being the deepest well yet drilled in Canada. A string of 6¼-inch casing was carried to a depth of 6,441 feet. The well is to be abandoned.

Calmont Oils Limited No. 1.—L. S. 2, section 1, township 20, range 3, west of the 5th meridian. Drilling is being carried on at a depth of 5,200 feet.

Canada Southern No. 1.—L. S. 9, section 1, township 20, range 3, west of the 5th meridian. Some oil was produced during the year. No drilling was carried on.

Cooper-Nanton No. 1.—L. S. 2, section 7, township 20, range 2, west of the 5th meridian. Drilling was suspended at a depth of 4,840 feet.

Dalhousie Oil Co. Limited No. 1.—L. S. 4, section 18, township 20, range 2, west of the 5th meridian. This well was 'spudded in' by the Southern Alberta Oils Limited in 1913 and produced a light oil in good quantity from a depth of 3,500 feet for some years. After it was taken over by the Dalhousie Oil Company, Limited, in 1925, it was carried to a depth of 4,565 feet where the limestone production was encountered and it commenced producing gas at the rate of approximately 19,000,000 cubic feet per day with a large production of naphtha.

Dalhousie Oil Co. Ltd. No. 5.—L. S. 16, section 30, township 19, range 2, west of the 5th meridian. Encountered an oil sand at a depth of 4,810 feet and has been carried to a depth of 4,900 feet. The well is flowing by heads at the rate of 60 to 70 barrels per day. The oil has a specific gravity of 50° Be.

Dalhousie Oil Co. Limited No. 6.—L. S. 10, section 13, township 20, range 3, west of the 5th meridian. Drilling has been carried to a depth of 4,850 feet.

Foothills Oil & Gas Co. Ltd. No. 1.—L. S. 4, section 26, township 20, range 3, west of the 5th meridian. A depth of 3,498 feet was attained when the rotary drill pipe was broken off, causing a long fishing operation which is now nearly completed.

Foothills Oil & Gas Co. Ltd. No. 2.—L.S. 8, section 1, township 20, range 3, west of the 5th meridian. A depth of 2,300 feet had been reached at the end of March. This well was formerly known as Dolomite No. 1.

Great West No. 1.—L.S. 2, section 7, township 20, range 2, west of the 5th meridian. This well reached a depth of 5,400 feet when operations were suspended.

Home Oil Co. Ltd. No. 1.—L.S. 10, section 20, township 19, range 2, west of the 5th meridian. Oil was encountered at a depth of 4,560 feet with a considerable flow of gas. The oil has a specific gravity of 53° Be. and is produced by flowing at the rate of 40 to 50 barrels per day.

Home Oil Co. Ltd. No. 2.—L.S. 14, section 20, township 19, range 2, west of the 5th meridian. Drilling has reached a depth of approximately 3,800 feet and is in progress.

Home Oil Co. Ltd. No. 3.—L.S. 10, section 20, township 19, range 2, west of the 5th meridian. Drilling was commenced on the 17th of February but, owing to the rig having burned down, a depth of 200 feet only was attained. The derrick has been rebuilt and drilling is now in progress.

Highland Oil Co. Ltd.—L.S. 5, section 5, township 20, range 2, west of the 5th meridian. This well was abandoned at a depth of 3,020 feet.

Illinois-Alberta Oil Co. Ltd. No. 1.—L.S. 14, section 12, township 20, range 3, west of the 5th meridian. This well continues to produce approximately 100 barrels per day of naphtha with accompanying gas.

Illinois-Alberta Oil Co. Ltd., No. 2.—L.S. 14, section 12, township 20, range 3, west of the 5th meridian. The well was 'spudded' on the 27th of August last with a diamond drill and had reached a depth of about 1,800 feet at the end of March.

Mill City Oil Co. (Old Record).—L.S. 13, section 4, township 19, range 2, west of the 5th meridian. No operations were carried on during the year.

McLeod Oil Co. Ltd., No. 1.—L.S. 16, section 1, township 20, range 3, west of the 5th meridian. This well was deepened to 3,930 feet encountering a production of about 9,000,000 cubic feet of gas and about 100 barrels per day of naphtha in the limestone.

McLeod Oil Co. Ltd., No. 2.—L.S. 16, section 1, township 20, range 3, west of the 5th meridian. Continued to produce naphtha and gas during the year, no permanent increase or decrease being noted.

McLeod Oil Co. Ltd., No. 3.—L.S. 16, section 1, township 20, range 3, west of the 5th meridian. This well was 'spudded' on the 25th of February, 1927, and carried to a depth of 3,200 feet, encountering a production of oil amounting to about 30 barrels per day. Recently the company resumed drilling operations to carry the well to the limestone.

McLeod Oil Co. Ltd., No. 4.—L.S. 16, section 1, township 20, range 3, west of the 5th meridian. The company's fourth well was commenced on the 13th of March.

New McDougall-Segur Oil Co. Ltd., No. 1.—L.S. 14, section 12, township 20, range 3, west of the 5th meridian. This well continues to produce from the horizons in the Cretaceous, at a depth of 2,490 feet.

New McDougall-Segur Oil Co. Ltd., No. 2.—L.S. 14, section 12, township 20, range 3, west of the 5th meridian. Oil was encountered at a depth of 2,620 feet and the well is being pumped.

New McDougall-Segur Oil Co. Ltd., No. 3.—L.S. 14, section 12, township 20, range 3, west of the 5th meridian. Drilling was commenced on the 26th of January, 1928, a depth of 1,850 feet being reached at the end of March.

New Valley Oil Co., No. 1.—L.S. 4, section 6, township 21, range 2, west of the 5th meridian. Drilling was carried on to a depth of 2,080 feet, when suspended in the fall.

New Black Diamond Oil Co., No. 1.—L.S. 1, section 3, township 20, range 3, west of the 5th meridian. No drilling was carried on during the year.

Okalta Oils Ltd., No. 1.—L.S. 1, section 1, township 20, range 3, west of the 5th meridian. Drilling was carried to a depth of 4,640 feet when it was decided to complete the well with a diamond drill and operations were suspended pending the arrival of this equipment.

Okalta Oils Ltd., No. 2 (Old Indiana Alberta, No. 2).—L.S. 8, section 1, township 20, range 3, west of the 5th meridian. A small amount of production was obtained from the well during the year. When the No. 1 Well was suspended the crew were placed at this well in preparation for deepening it.

Regent Oil Co. Ltd., No. 1.—L.S. 16, section 1, township 20, range 3, west of the 5th meridian. A depth of 2,475 feet had been attained at the end of March.

Royalite Oil Co. Ltd., No. 1.—L.S. 14, section 6, township 20, range 2, west of the 5th meridian. Some production of gas was taken from the well during the year although the absorption plant is not now being operated.

Royalite Oil Co. Ltd., No. 2.—L.S. 11, section 6, township 20, range 2, west of the 5th meridian. This well also produced some gas during the year.

Royalite Oil Co. Ltd., No. 3.—L.S. 15, section 6, township 20, range 2, west of the 5th meridian. Some production of gas was taken from this well during the year.

Royalite Oil Co. Ltd., No. 4.—L.S. 12, section 7, township 20, range 2, west of the 5th meridian. This well continued to produce gas and naphtha, the latter increasing in quantity. In December last it produced at the rate of 650 barrels per day.

Royalite Oil Co. Ltd., No. 6.—L.S. 16, section 31, township 19, range 2, west of the 5th meridian. This well was carried, by the hydraulic rotary system, to a depth of 4,280 feet when a diamond drill was installed and it is expected to complete the well with this equipment.

Royalite Oil Co. Ltd., No. 7.—L.S. 3, section 13, township 20, range 3, west of the 5th meridian. The productive horizon in the limestone was encountered at a depth of 4,208 feet, and at last reports the well was producing about 9,000,000 cubic feet of gas and about 140 barrels of naphtha per day.

Royalite Oil Co. Ltd., No. 8.—L.S. 15, section 12, township 20, range 3, west of the 5th meridian. This well has been carried to a depth of 3,676 feet where the 6¼-inch casing was set in the limestone. A heavy flow of gas was encountered.

Royalite Oil Co. Ltd., No. 9.—Section 13, township 20, range 3, west of the 5th meridian. This well has been drilled to a depth of 3,700 feet with drilling in progress.

Royalite Oil Co. Ltd., No. 10.—L.S. 10, section 12, township 20, range 3, west of the 5th meridian. Drilling was suspended at a depth of 2,332 feet in the producing sand of the Cretaceous formation and a production of 30 to 35 barrels of oil is being obtained.

Royalite Oil Co. Ltd. No. 11.—L.S. 10, section 12, township 20, range 3, west of the 5th meridian. Drilling has been carried to a depth of 1,700 feet and is in progress.

Royalite Oil Co. Ltd. No. 15.—L.S. 1, section 12, township 20, range 3, west of the 5th meridian. This well is rigged up ready to 'spud in'.

Royalite Oil Co. Ltd. No. 16.—L.S. 2, section 12, township 20, range 3, west of the 5th meridian. This well was 'spudded in' on March 30.

Stockmens Oils Ltd. No. 1.—L.S. 1, section 27, township 20, range 3, west of the 5th meridian. Further drilling was abandoned at a depth of 5,320 feet and the well plugged back to the gas horizon at 1,760 feet.

Stockmens Oils Ltd. No. 2.—L.S. 7, section 27, township 20, range 3, west of the 5th meridian. Rigging up preparatory to 'spudding in'.

Seneca Oils Ltd. No. 1.—L.S. 1, section 34, township 20, range 3, west of the 5th meridian. Drilling is being carried on at a depth of 3,700 feet.

Spooner Oils Ltd. No. 1.—Section 13, township 20, range 3, west of the 5th meridian. Drilling is proceeding at a depth of 4,950 feet. The limestone was encountered at a depth of 4,600 feet and the well is producing about 2,000,000 cubic feet of gas with considerable naphtha.

Sentinel Oil Co. Ltd. No. 1.—L.S. 14, section 8, township 20, range 2, west of the 5th meridian. Drilling was suspended at a depth of about 3,700 feet. An exceptionally long string of 12½-inch casing was landed in this well, the depth being 3,434 feet.

Vulcan Oils Ltd. No. 2.—L.S. 11, section 13, township 20, range 3, west of the 5th meridian. Drilling was in progress at a depth of 4,850 feet.

In the Peace River, Fort Vermilion and Pouce Coupé areas no operations were carried on during the fiscal year.

Saskatchewan

Kenaston District

Big Six Oil Co. Limited No. 1.—L.S. 16, section 18, township 29, range 2, west of the 3rd meridian. This well was carried to a depth of 85 feet when operations were suspended in the fall.

Readlyn District

Ribstone Wainwright Oils Ltd. No. 1.—L.S. 11, section 7, township 8, range 27, west of the 2nd meridian. Drilled to a depth of 365 feet when operations were suspended.

Riverhurst District

Riverhurst Oil & Gas Co. Ltd. No. 1.—Section 33, township 22, range 7, west of the 3rd meridian. This well was carried to a depth of 518 feet before suspending operations for the winter.

Rosetown District

Rosetown Lease Holdings & Development Co. No. 1.—L.S. 13, section 4, township 31, range 17, west of the 3rd meridian. Drilling operations were commenced in the fall and suspended at a depth of 225 feet.

Simpson District

Simpson Oil Company, Ltd. No. 1.—L.S. 2, section 9, township 29, range 25, west of the 2nd meridian. Drilling was carried to a depth of 1,371 feet before suspending for the winter.

Vera District

Unity Valley Oil Co. Ltd. No. 1.—Section 22, township 41, range 24, west of the 3rd meridian. Operations reached a depth of 2,925 feet when suspended.

Unity Valley Oil Co. Ltd. No. 2.—L.S. 12, section 14, township 41, range 24, west of the 3rd meridian. Derrick erected for No. 2 well on the above location.

Manitoba

Ochre River District

J. W. Holmes No. 1.—L.S. 10, section 30, township 22, range 17, west of the Principal meridian. Carried a well to a depth of 1,487 feet.

Mack Oil Co. Limited.—L.S. 12, section 30, township 22, range 17, west of the Principal meridian. This well is being drilled at a depth of 530 feet.

Grandview District

Irro Gas & Oil Co. No. 2.—L.S. 11, section 18, township 26, range 23, west of the Principal meridian. Operations were suspended at a depth of 136 feet.

Rapid City District

Prairie Petroleums Limited.—Section 3, township 13, range 20, west of the Principal meridian. Drilling was suspended at a depth of 704 feet.

Northwest Territories

No petroleum and natural gas operations were carried out in the Northwest Territories during the fiscal year.

NATURAL GAS PRODUCED AND USED IN ALBERTA IN 1927

Quantities in thousands of cubic feet

Field	Produced	Used			
		Domestic	Commercial	Industrial	Total
Turner Valley—					
For use in field	909,892	4,500	.....	905,392	909,892
For use in refinery	1,050,267	.....	.....	1,050,267	1,050,267
For use by Gas Co.	3,387,163				3,387,163
Bow Island	372,342				372,342
Foremost	890,209	3,158,918	535,641	974,317	890,209
Barnwell	19,162				19,162
Viking—					
Used in Edmonton	2,200,607	1,511,470	426,698	262,439	2,317,402
Used in towns	116,795	51,713	23,182	41,900	
Wainwright—					
Used in town	114,089	42,666	.....	71,423	116,349
Used in drilling	2,260	.....	.....	2,260	
Wetaskiwin	50,000	.....	.....	50,000	50,000
Bassano	3,650	.....	.....	3,650	3,650
Redcliff	858,000	71,000	.....	787,000	858,000
Medicine Hat—					
City System	1,804,421	631,294	43,124	1,130,003	
Private wells	825,000	.....	.....	825,000	2,647,421
Farm wells	18,000	2,000	.....	16,000	
Totals	12,621,857	5,473,561	1,028,645	6,119,651	12,621,857

OIL PRODUCTION FOR THE YEAR ENDING MARCH 31, 1928

Naphtha	304,506 bbl
Light crude	49,723 "
Heavy crude	4,082 "
Total	358,311 "

SUMMARY OF OPERATIONS DURING 1927

—	Turner Valley	Other areas of Alberta	Saskatchewan	Manitoba	Total
Wells drilling during year	33	29	6	4	72
Footage drilled	59,206	37,819	3,150	1,505	101,680
Wells commenced	13	15	3	2	32
Wells completed	12	.....	.....	.....	12
Wells suspended	2	10	6	3	21
Wells abandoned	2	4	1	.....	7
Wells encountering oil shows	11	9	3	.....	23
Wells encountering gas shows	10	10	2	.....	22
Wells encountering oil production	6	1	.....	.....	7
Wells encountering gas production with light oil	2	.....	.....	.....	2
Wells encountering naphtha laden gas production	5	.....	.....	.....	5
Wells encountering asphalt	.....	2	.....	.....	2
Wells encountering dry gas production	1	9	.....	.....	10
Wells now producing oil by pumping	5	2	.....	.....	7
Wells now producing oil by flowing	2	.....	.....	.....	2
Wells now producing naphtha laden gas	8	.....	.....	.....	8

VI

SURVEYS BUREAU

REPORT OF THE DIRECTOR GENERAL OF SURVEYS, J. D. CRAIG

The Surveys Bureau was formed in 1922 by the amalgamation, under the Director General of Surveys, of three branches of the department engaged in surveying work: the Geodetic Survey, the Topographical Survey, and the International Boundary Commission, Canadian Section.

The Geodetic Survey which has been in operation since 1905 has for its main function the determination, with extreme accuracy, of the geographic positions and the elevations above sea-level of selected points throughout the country. These points are marked by permanent monuments which serve as control for all other surveys in the areas adjacent to them, whether federal, provincial, municipal or private. Twenty-four parties were in the field.

The Topographical Survey is the oldest surveying organization in the department, having been in existence under different names since 1870 when legal surveys of Dominion lands were first started in the West. Legal land surveys still form part of its duties but of late years attention is being given chiefly to topographical mapping, the information for which is obtained from surveys specially organized for mapping purposes, from aerial photographs taken in co-operation with the Royal Canadian Air Force, and from the extensive legal survey records of the branch. This branch also maintains a laboratory for the testing, adjustment and certification of various scientific instruments. Twenty parties were in the field, and in addition six officials acted as navigators for planes of the Royal Canadian Air Force.

The International Boundary Commission, Canadian Section, working in conjunction with the United States Section, inspects the 5,500 miles of boundary line between Canada and the United States, and maintains it in a state of effective demarcation.

During the season the Director General of Surveys, who is also Canadian International Boundary Commissioner, accompanied by the United States Commissioner, made a trip of inspection which included Dixon entrance and cape Muzon at the southern end of the Alaska section of the boundary, point Roberts on the gulf of Georgia, and the Northwest Angle inlet of the lake of the Woods.

The Director General also discussed with provincial officials such matters as town planning and the restoration of survey monuments, and later visited a survey party engaged in mapping in Saskatchewan.

The town planning activities of the department heretofore carried on under the National Parks of Canada Branch, were taken over during the year and now form the Town Planning Division of the Surveys Bureau. At present the main activities of the division include the preparation of lecture notes and slides featuring town planning matters; a continually increasing correspondence dealing with requests for advice and literature on town planning; and publicity service for such publications as the *Journal of the Town Planning Institute*. The increasing interest that is being taken in this new development indicates its growing importance in Canada and throughout the civilized world.

A brief summary of the work of each of the three major divisions of the Surveys Bureau for the fiscal year follows. Detailed reports covering the activities of the Geodetic Survey and the Topographical Survey are issued as separate publications.

Geodetic Survey

In the fiscal year 1927-28 the Geodetic Survey of Canada furnished accurately determined geographical positions and precise elevations for the basic control of all Canadian mapping operations and the use of the engineering profession.

The establishment of such control points involved the extension of geodetic primary and secondary triangulation nets in various provinces, base line measurements, precise and secondary levelling and the observing of latitudes, longitudes and azimuths at Laplacian stations. In the office, triangulation and level adjustments have been continued. Mathematical investigations have also been carried on to solve special problems arising from geodetic operations in Canada.

Triangulation and Precise Traverse.—Work was completed on a net running southwest from Halifax to Liverpool, N.S., thence north to Caledonia, to which hydrographic stations, topographic stations and lighthouses were connected. A net to connect the St. Lawrence River net with the Chaleur Bay net was laid down. Work was continued to give geodetic control in the Rouyn mining area, and also in the Gatineau valley. Work on nets in northern Ontario was undertaken to serve the mineralized areas from Kirkland lake north to lake Abitibi and east to the Kamiskotia district.

The net extending from the Canada-United States boundary northward through Calgary reached a point fifty miles south of Edmonton. Triangulation extending the control carried inland from Prince Rupert reached a point 250 miles from the coast. Secondary triangulation was extended across Vancouver island from the primary triangulation stations north of Victoria to tie in a Geological Survey net covering a large part of the island. Thus co-ordinated with the Geodetic Survey net the extensive and accurate data supplied by the Geological Survey of Canada, become of prime geographic value.

Precise Levelling.—Levelling operations were carried on in Quebec, Ontario, Manitoba, Saskatchewan, and British Columbia. A line of secondary levels was completed between Tring Junction and Sherbrooke, Quebec. Precise levelling was completed between Ste. Therese and Mont Laurier and a line of secondary levels was continued from Mont Laurier to Maniwaki, Quebec, where closure was made with the precise level line from Ottawa. Levelling in Montreal was completed under the usual co-operative arrangement. Precise level control including 651 bench-mark monuments now extends from Montreal West to the foot of the island, and northward to Riviere des Prairies. Twenty-two fundamental bench-mark monuments were established in Ontario. Important levelling control was furnished in the Prairie Provinces, including fundamental bench marks at Canora, Dauphin and Swan River, Manitoba; and at Yorkton, Saskatchewan. A number of short lines were completed in British Columbia and fundamental bench marks were constructed at Armstrong and Kamloops.

Mathematical Research and Adjustments.—The method of converting latitudes and departures to true latitudes and longitudes, as applied to precise traverses of the Geodetic Survey, has received consideration and a publication entitled "The Conversion of Latitudes and Departures of a Traverse to Geodetic Differences of Latitude and Longitude" is in press. A treatise entitled *Geodesy* has been distributed.

The precise level net of Canada has been adjusted by the method of differential adjustment recently developed. The work of triangulation adjustment has been increased with the closures this season of large loops. The 1,800 miles of triangulation in Eastern Canada is being adjusted by a process of division into five large nets. The British Columbia Coast net is under adjustment for the determination of corrected positions and the work entailed is nearing completion. Other adjustments in hand are those for the New Ontario net, the Western Ontario net, and the British Columbia precise traverse.

Base Line Measurements.—Base lines were measured at Smithers, British Columbia, Edmonton and Calgary, Alberta, and at Windigo, Quebec, to establish control for the scale of length of triangulation in these localities.

Geodetic Astronomy and Isostasy.—Laplace observations were made at Haysport, Martin, Lorne, Skeena Crossing, and East Base, British Columbia, to control the azimuth of the precise traverse between Prince Rupert and Smithers. Another Laplace observation was made at Windigo in the Quebec triangulation net for azimuth control. Twelve of the established geodetic triangulation stations in Ontario were occupied for latitude and longitude for the determination of the deviation of the vertical. A comparison of the values so obtained with those given by the adjusted triangulation is of use in the study of isostasy.

Standards.—The standardization of the invar tapes used in base line measurement and of the levelling rods of the precise levelling division of the survey shows the continued need of a periodic comparison in order to attain the degree of accuracy required. Three base lines were measured in Western Canada, and to obviate returning to Ottawa with the tapes for standardization, prior to the measurement of the second and third bases, three of the microscopes used in standardization were taken to the field where the three base line tapes used were carefully intercompared.

Topographical Survey

The usual activities of the Topographical Survey were proceeded with as in past years. Field work was carried on in eight provinces and in the Northwest Territories. Twenty field parties were employed, and in addition six Dominion land surveyors acted as navigational officers for the planes of the Royal Canadian Air Force in taking pictures for aerial surveying operations.

The year was marked by an increase of between five and six per cent in the number of maps, plans, and publications distributed to the public. This increase has been going on steadily for a number of years and reflects the increasing interest on the part of the public in the service rendered by this organization in this regard.

A great portion of this interest is undoubtedly due to the rapid advancement in Canada of aerial photography as an aid in surveying and mapping, whereby the gathering of the necessary information is greatly expedited and much simplified. The service of the aerial photograph does not end with the production of the map sheets. A distinct advantage of the aerial photograph is that it is a permanent record, available for study for any required purpose at any future time. In this connection the Topographical Survey has been constituted by Order in Council a central agency for the recording and indexing of all aerial photographs taken by the Dominion Government services, thus preserving them for use in other directions when their original purpose in connection with mapping has been served.

Topographical and Photo-topographical Surveys.—A total area of 7,353 square miles of new topographical mapping was completed, a second revision was made of an area of 2,550 square miles, and in addition some 10,000 square miles were covered by exploratory survey.

By provinces the area of new mapping is distributed as follows: Nova Scotia, 184 square miles; New Brunswick, 291 square miles; Quebec, 460 square miles; Saskatchewan, 4,218 square miles; Alberta, 1,230 square miles; British Columbia, 970 square miles; total, 7,353 square miles.

Of this total 805 square miles is for publication at a scale of 1 mile to 1 inch; 2,330 at a scale of 2 miles to 1 inch; and 4,218 at a scale of 3 miles to 1 inch. The 2,550 square miles of second revision referred to above are for publication at a scale of 4 miles to 1 inch.

The 10,000 square miles covered by exploratory surveys are for publication on the scale of 4 miles to 1 inch. This exploratory work was carried on in northeastern British Columbia and the resulting maps will be exploratory editions only.

Different methods of mapping were used to conform with the requirements of the scale and with the topography of the district being mapped. For the one-mile scale ordinary plane-table methods, in some cases supplemented with vertical aerial photographs, were used. For the two-mile scale plane-table methods with vertical aerial photographs and, in the rough topography of British Columbia photo-topographical methods supplemented with range-finder and plane-table, were used. For the three-mile and four-mile scales the special method of sectional sheet revision applicable to Manitoba, Saskatchewan, and parts of Alberta was employed.

Considerable progress has been made in the application of vertical photographs to topographical mapping.

Control Surveys.—Surveys as a basis for topographical mapping were carried on in the Moncton area in New Brunswick and in the Ste. Anne de Beaupre area and the district north of Ottawa in Quebec. The Ontario Department of Lands and Forests conducted surveys in the Muskoka area in co-operation with this organization. In accordance with the general practice, permanent monuments as reference points to which other surveys may be tied were established in suitable locations at points about three miles apart. The geographical co-ordinates of these monuments are computed and this information is available to the provincial authorities.

The astronomical positions of a number of points south and east of Kenora were determined for the purpose of co-ordinating existing land surveys. Similar observations were taken west of Island lake to serve as control for aerial mapping. Ground investigation was carried on in the Wood Buffalo Park area, near Fort Smith, Northwest Territories.

Aerial Surveys.—During the year a total area of 45,850 square miles was photographed in co-operation with the Royal Canadian Air Force for mapping purposes. Of this area about 63 per cent, or 28,650 square miles, were covered by oblique, and 37 per cent, or 17,200 square miles, by vertical axis photography.

During the year 62,000 aerial photographs were placed in the index and, in addition there were received 63,000 prints for constructing mosaics, for the use of surveyors in the field and for distribution on request to provincial officials, city engineers, mining and lumbering corporations, municipalities, and the general public. Of the former, 9,360 were received from a private company, being vertical photographs in the province of Quebec done under contract, and 7,756 were old photographs taken by the royal Canadian Air Force from 1920 to 1922, copies of which had never been furnished to this office.

From the photographs (obtained for mapping purposes) mosaics of ten different localities have been constructed.

From vertical photographs, one sheet on the two-mile scale, and from oblique photographs eight sheets on the four-mile scale, all of the National Topographic Series, are under preparation.

Vertical photographs have also been taken covering four sheets of the National Topographic Series on the two-mile scale, and areas of 8,000 square miles in the Wood Buffalo park near Fort Smith, N.W.T., and 2,650 square miles in the Prince Albert national park in Saskatchewan, but the mapping of these is postponed until further surveys over these areas have been carried on. Three other sheets on the four-mile scale, prepared from oblique photographs, are practically completed, but these also are being held for further photographic surveys.

The following sheets of the National Topographic Series were completed during the year from photographs obtained during the previous year:—

1. On the two-mile scale from vertical photographs, the Rouyn Lake and Rouyn-Larder Lake sheets;
2. On the four-mile scale, from oblique photographs, the Grand Rapids, Cormorant Lake, The Pas, Wekusko Lake, Trout Lake, and Sioux Lookout sheets. The Armstrong and Lake St. Joseph sheets were partly compiled and should soon be completed.

Special mapping was carried on for the Dominion Forest Service, in which timber type maps were prepared of an area of about 35,000 square miles in the vicinity of lake Winnipeg. This work involved the preparation of eighteen special maps. Copies of these were supplied to the Dominion Forest Service on the scales of one-half mile, two miles, and four miles to the inch. Special mapping was also done for the International Paper Company in the area south of Sioux Lookout, Ont., for the Mining Corporation of Canada, showing a transmission line route from Nelson river to Flinflon mine in northern Manitoba; and for the Ontario Department of Lands and Forests.

Land Surveys.—One townsite was laid out at Cloan, Sask. A resurvey of the mission property at Morley, Alta., was made to effect the registration of title. The Government reserve at Port Nelson was laid out and the survey of a considerable number of summer resort lots at Atikameg and Cormorant lakes in northern Manitoba was made. Settlement lots were also surveyed at Cunningham Landing on Slave river, N.W.T.

Land in township 45, range 4, west 2nd meridian, urgently required for settlement in the vicinity of Hudson Bay Junction, was subdivided; miscellaneous subdivision to provide for squatters on unsurveyed land was made in seven other localities. Two timber berths and several Indian reserves were laid out in British Columbia, and small miscellaneous surveys and investigations were made in 140 other places.

Land Classification Surveys.—Land classification surveys comprise a thorough field investigation of our land resources, and provide a record of the acreage of the different grades of available land within investigated districts. This information is of value to intending settlers and is a guide to those in charge of directing settlement to suitable lands. It is also of value in connection with the study of forestry problems and may be made the basis for the selection of areas to be included within forest reserves.

During the year an aggregate of 434,080 acres was examined at the request of the Forest Service of this department, comprising 147,360 acres within part of the proposed Kehiwin forest reserve, Alberta; while in the total of 286,720 acres covered in the province of Saskatchewan, 192,320 acres are included within various reserves and 94,400 acres are adjacent to reserves.

Mapping and Mechanical Work.—Drafting, photographing and lithographic work was proceeded with. A considerable number of photographic copies of maps or of parts of maps were made to required scale either for our own com-

piling office or at the request of other branches of this or other departments. In the list of important maps, plans, etc., there are some sixty different items, the total number of copies being in the neighbourhood of 90,000.

Physical Testing Laboratory.—As the laboratory becomes more widely known the requests for assistance received from other organizations continue to increase. More than sixty per cent of the tests made in the year under review were for other services. Owing to the increase in the routine testing operations difficulty was experienced in carrying out the investigations and allied work in connection with the maintenance of standards and the development of technique.

A great increase is recorded in the number of thermometers submitted for testing. No fewer than 4,345 thermometers, covering a range from 50° F. below zero to 500° F. above zero, were received for test during the year. The use of the facilities for standardizing thermometers in terms of the International Standard Temperature Scale is thus becoming more and more general.

Another branch of the laboratory where assistance was much in demand is the instrument shop. The shop undertakes the repair of scientific instruments on behalf of Government organizations, and it might be noted that in the majority of instances this work would otherwise have to be sent out of the Dominion.

During the year the laboratory completed the study of the Dominion Standard Yard and other length standards of national interest. A bulletin describing this work is now being prepared for publication.

Magnetic Declination Surveys.—The needle of the magnetic compass does not point north but more or less to the east or west at different places; so that the leading countries of the world measure its deviation from the true direction which is called the " declination," and show this on magnetic maps for compass users.

Such information is particularly valuable in such a large new country as Canada, so since 1880 the Topographical Survey has been making these measurements in conjunction with its other regular work. They are thus made economically when the surveyors are already on the ground with the instruments required.

During 1927 this work was continued and some 1,300 such measurements were made, bringing the total number to date up to more than 23,000. Before publication these results are compiled with magnetic data secured by other branches. A new declination map was published for Canada for the use of surveyors, airmen, navigators, explorers, miners, prospectors, timber cruisers, settlers, and hunters.

The Dominion Observatory also takes magnetic observations for purely scientific purposes, and co-operation between this service and the observatory is close in order to utilize to the full the results of all work done.

An arrangement was made whereby the Survey Office of the Ontario Department of Lands and Forests co-operates in such measurements with the Topographical Survey. During 1927 their field officers made more than 300 such measurements.

The Topographical Survey co-operates also with the Canadian Hydrographic Service of the Department of Marine and Fisheries and supplies the compass information for their charts.

Registration, Records, and Distribution Office.—During the twelve months there were distributed 33,651 maps, 3,271 publications, and 23,155 official plans of townships, townsites, etc.

Survey returns received for examination from surveyors in the field, railway companies, and provincial governments, and entered in the various registers.

plotted on the various index maps, etc., comprised 305 books of field notes, 411 plans, and 2,963 miscellaneous returns. During the year 296 new books and 612 new plans were placed on record, the total number on record now being 19,969 books of field notes and 35,672 plans.

International Boundary Commission—Canadian Section

A conference of the commissioners was held in Ottawa in May, 1927, when a division of the field work to be done during the coming season was agreed upon and certain matters of detail were discussed and the necessary decisions made.

A final draft of first joint annual report required under the treaty of 1925 was adopted. Later two signed copies of this report were submitted by the commissioners to their respective governments. These reports show in detail the work of maintaining the boundary in a state of effective demarcation, done between the ratification of the treaty and December 31, 1926.

As a result of the above conference the United States Section of the Commission undertook the work of reclearing the boundary vista, repairing any monuments found to have deteriorated and running a line of levels on the Quebec-Vermont section of the International Boundary. The United States Section also undertook to locate the exact position of the boundary on the new Peace Bridge between Fort Erie and Buffalo and to mark it with bronze plates of an appropriate approved design, and to locate the position of the boundary on the other bridges across the Niagara river with a view to having them marked also with bronze plates in the near future.

The Canadian Section of the Commission undertook the work of reclearing the boundary vista, repairing deteriorated monuments, and running levels along the north line of the New Brunswick-Maine section of the International Boundary. This work required the services of a field party averaging ten men from May 22 to November 15. During the season 64 miles of vista were cut, 57 monuments were repaired and the elevations of 265 monuments were determined by this party.

In August the Canadian and United States Commissioners made a personal inspection of a number of points on the International Boundary while on a trip, during which each inspected in his own country certain work being carried on under his direction in the respective capacities of Director General of Surveys and Director of the United States Coast and Geodetic Survey. The first section visited was Dixon entrance and Portland canal. Through the courtesy of the United States Coast and Geodetic Survey the hydrographic survey ship *Explorer* was made available for the use of the commissioners on this portion of their inspection trip. After inspecting the boundary in the vicinity of Stewart, British Columbia, the commissioners went south to Vancouver and examined the site of certain proposed boundary range marks at point Roberts. After a lapse of a week the commissioners met again at Winnipeg, and proceeding to Kenora, inspected the boundary in the vicinity of the Northwest Angle inlet of lake of the Woods.

In September at the request of the Commissioner of Customs, a determination was made of the position of the boundary with respect to a wharf on a Canadian island known as 101G in that channel of the St. Lawrence river known as the Rift. The Department of Customs had been uncertain whether or not this wharf extended across the International Boundary and consequently had been unable to determine whether or not regulations applying to foreign vessels calling at Canadian wharves should properly be enforced. As a result of surveys made by one of the commissioner's staff, it was definitely established that the wharf in question lies entirely within Canadian waters.

A joint inspection of the work on the Niagara river was made early in August by an engineer from each section of the Commission. A similar joint inspection was made of the work on the Quebec-Vermont and New Brunswick-Maine lines between November 1 and 11.

A memorandum was prepared for the Canadian Legation at Washington giving full information regarding the so-called "neutral strip" on the various sections of the International Boundary.

Survey data of the area in British Columbia adjacent to the 49th parallel boundary were supplied by the Commission to the Department of Lands of British Columbia, for use in their surveys in those districts. Similar data and maps of the area in the vicinity of lake Namakan on the Ontario-Minnesota boundary were supplied to the Dominion Water Power and Reclamation Service of the Department of the Interior for the same purpose.

The office work of the staff during the year has been largely devoted to adjusting surveys, computing geographic positions, proof-reading boundary maps, making triangulation sketches, and doing other related work in preparation of three joint reports, which have yet to be submitted to the Governments of Canada and the United States by the commissioners. One such report is now in the printers' hands and it is hoped to have one of the three above referred to ready by the end of the fiscal year.

A large number of maps, photographs, reports and items of specific information regarding the boundary were supplied upon request to various government departments and to the general public.

DOMINION OF CANADA

REPORT OF THE DEPARTMENT

OF

IMMIGRATION AND COLONIZATION

FOR THE

FISCAL YEAR ENDED MARCH 31, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the report of the transactions of the Department of Immigration and Colonization for the fiscal year ended March 31, 1928.

Respectfully submitted,

ROBERT FORKE,

Minister of Immigration and Colonization.

74870—1½

TABLE OF CONTENTS

Report of—	PAGE
Deputy Minister	5
Chief Controller of Chinese Immigration	51
Commissioner of Colonization	52
Director of European Emigration for Canada in London, England	57
Director of Publicity	74
Supervisor of the Women's Branch	78
Supervisor of Juvenile Immigration	86
Eastern Division Commissioner of Immigration	90
Western Division Commissioner of Immigration	93
Pacific Division Commissioner of Immigration	98

REPORT

OF THE

DEPARTMENT OF IMMIGRATION AND COLONIZATION

1927-28

DEPUTY MINISTER, W. J. EGAN

In presenting the Eleventh Annual Report of the department, attention is directed to the reports of the various officials of the department describing the work done not only in Canada, but also in the United States, the British Isles, and on the Continent of Europe.

The statistical tables published, some of which are new, are designed not only to give general information, but to supply an answer to most of the inquiries that are addressed to the department from time to time.

The report of the Commissioner of Colonization contains a very useful summary of the Empire Settlement Schemes in effect during the year and shows the progress made in federal-provincial co-operation. This report also gives a summary of the work accomplished in the United States.

The Director of European Emigration for Canada in London describes in his report the work carried on in the British Isles and on the Continent and gives much useful information for those interested in the nature of the efforts made to attract immigrants. Embodied in that report are extracts from the reports of the various agents in the British Isles. These extracts are published to show the methods of work and the difficulties that have to be met.

The report of the Director of Publicity contains a general summary of the work of the department in securing publicity and in distributing information.

Attention is called to the very full report presented by the Supervisor of the Women's Branch touching as it does upon the activities of the department in women's work both within and outside of Canada. A feature of this report that should not be overlooked is the evidence of the very hearty and helpful co-operation that exists between the department and various voluntary and other organizations interested in this feature of immigration.

Other reports refer to Chinese immigration, Juvenile immigration and to the work of the three Division Commissioners. The report of the work of the Land Settlement Branch will be found in the general report issued by the Soldier Settlement Board and is, therefore, not reproduced in this report.

During the year under review the first steps were taken to establish overseas a Canadian medical examination of oversea immigrants both from the British Isles and the Continent of Europe. Medical officers attached to the Department of Health were appointed for this service. The work on the Continent is done at seven centres as follows: Paris, Antwerp, Rotterdam, Hamburg and Bremen, Danzig, and Riga, these being with the exception of Paris, the principal ports of embarkation. Medical inspection at these ports takes place immediately prior to sailing. There is no provision for Canadian medical examination of immigrants in the interior of the States from which they come. It is

customary for Continental immigrants to arrive at the ports of sailing several days before the date of sailing and it is during this period that their examination takes place.

In the British Isles the arrangement is much easier for the migrant. Canadian doctors are always available at the ports of embarkation while other doctors travel on a regular itinerary visiting weekly, fortnightly or monthly, hundreds of inland points. The examination may take place at any time within four months of the date of sailing and when the examination is completed the migrant is handed a medical card valid for four months. Towards the close of the fiscal year it became evident that the facilities for medical examination in the British Isles might be extended by the use of British Roster Doctors and this matter is now under consideration. All medical examination whether in the British Isles or on the Continent of Europe is without charge to the migrant.

In February, 1928, the general subject of Immigration, including the Immigration Act and Regulations and the work of the department was referred to the Select Standing Committee on Agriculture and Colonization. A number of meetings of this committee were held and a great deal of evidence taken before the close of the year, but the inquiry was continued into next fiscal year and its findings and recommendations will no doubt find ample reference in the report for next year.

A movement not included in the immigration figures is that of returned Canadians. Since April, 1924, a record has been kept of the number of Canadian citizens returning to Canada after an absence in the United States, who left Canada with the intention of making their permanent home in the United States and subsequently returned to Canada declaring their intention of again taking up permanent residence here. Persons who left Canada on visits or for other temporary purpose, have not been included in this summary. Returning Canadian citizens are divided into three classes: (*a*) those born in Canada, (*b*) those British born who acquired Canadian domicile, and (*c*) those who secured naturalization in Canada. The figures since April 1, 1924, are as follows:—

—	Canadian born citizens	British subjects who had acquired Canadian domicile	Naturalized Canadian citizens	Totals
1924–25—				
April	3,608	289	190	4,087
May	4,170	505	261	4,936
June	3,962	447	311	4,720
July	4,426	405	296	5,127
August	4,023	552	416	4,991
September	2,952	434	239	3,625
October	2,844	394	242	3,480
November	2,614	357	215	3,186
December	2,618	353	194	3,165
January	1,395	199	121	1,715
February	1,641	239	132	2,012
March	2,220	313	198	2,731
Totals	36,473	4,487	2,815	43,775
1925–26—				
April	2,599	245	151	2,995
May	2,722	308	181	3,211
June	2,514	256	165	2,935
July	2,650	226	153	3,029
August	3,105	308	254	3,667
September	2,084	212	149	2,445
October	2,576	227	190	2,993
November	3,561	423	347	4,331
December	6,707	702	514	7,923
January	3,632	441	261	4,334
February	3,525	383	259	4,167
March	4,571	371	249	5,191
Totals	40,246	4,102	2,873	47,221
1926–27				
April	6,208	441	269	6,918
May	7,184	546	269	7,999
June	5,280	571	233	6,084
July	5,462	768	257	6,487
August	5,207	713	361	6,281
September	3,422	626	173	4,221
October	3,503	370	163	4,036
November	2,887	287	112	3,286
December	2,855	275	159	3,289
January	2,021	180	96	2,297
February	1,987	280	130	2,397
March	3,239	269	154	3,662
Totals	49,255	5,326	2,376	56,957
1927–28—				
April	3,711	346	152	4,209
May	4,831	573	157	5,561
June	4,167	373	198	4,738
July	3,000	348	182	3,530
August	3,252	347	215	3,814
September	3,059	315	157	3,531
October	3,203	197	81	3,481
November	2,232	162	84	2,478
December	2,136	170	74	2,380
January	1,505	136	42	1,683
February	1,634	136	42	1,812
March	2,407	177	86	2,670
Totals	35,137	3,280	1,470	39,887

TABLE 1.—Immigration to Canada, from 1881 to 1928

—		From British Isles	From United States	From Other Countries	Totals
*Calendar year	1881	17,033	21,822	9,136	47,991
"	1882	41,283	58,372	12,803	112,458
"	1883	45,439	78,508	9,677	133,624
"	1884	31,787	65,886	6,151	103,824
"	1885	18,591	57,506	3,072	79,169
"	1886	23,507	40,650	4,995	69,152
"	1887	31,104	41,046	12,376	84,526
"	1888	30,852	44,952	12,962	88,766
"	1889	19,384	67,896	4,320	91,600
"	1890	21,793	50,336	2,938	75,067
"	1891	22,042	52,516	7,607	82,165
"	1892	22,636	.....	8,360	30,996
"	1893	20,071	.....	9,562	29,633
"	1894	16,004	.....	4,825	20,829
"	1895	14,956	.....	3,834	18,790
"	1896	12,384	.....	4,451	16,835
"	1897	11,383	2,412	7,921	21,716
"	1898	11,173	9,119	11,608	31,900
	1899	10,660	11,945	21,938	44,543
Six months ended June 30,	1900	5,141	8,543	10,211	23,895
Fiscal year ended June 30,	1901	11,810	17,987	19,352	49,149
" "	1902	17,259	26,388	23,732	67,379
" "	1903	41,792	49,473	37,099	128,364
" "	1904	50,374	45,171	34,786	130,331
" "	1905	65,359	43,543	37,364	146,266
" "	1906	86,796	57,796	44,472	189,064
Nine months ended March 31,	1907	55,791	34,659	34,217	124,667
Fiscal year ended March 31,	1908	120,182	58,312	83,975	262,469
" "	1909	52,901	59,832	34,175	146,908
" "	1910	59,790	103,798	45,206	208,794
" "	1911	123,013	121,451	66,620	311,084
" "	1912	138,121	133,710	82,406	354,237
" "	1913	150,542	139,009	112,881	402,432
" "	1914	142,622	107,530	134,726	384,878
" "	1915	43,276	59,779	41,734	144,789
" "	1916	8,664	36,937	2,936	48,537
" "	1917	8,282	61,389	5,703	75,374
" "	1918	3,178	71,314	4,582	79,074
" "	1919	9,914	40,715	7,073	57,702
" "	1920	59,603	49,656	8,077	117,336
" "	1921	74,262	48,059	26,156	148,477
" "	1922	39,020	29,345	21,634	89,999
" "	1923	34,508	22,007	16,372	72,887
" "	1924	72,919	20,521	55,120	148,560
" "	1925	53,178	15,818	42,366	111,362
" "	1926	37,569	18,778	39,717	96,064
" "	1927	50,378	21,025	72,588	143,991
" "	1928	51,552	25,007	75,038	151,597

*The figures of immigration from the United States prior to 1892 fail to distinguish between immigrants and non-immigrants.

TABLE 2.—Statement of Immigration to Canada, for the Period July 1, 1900, to March 31, 1910

	Fiscal Years										Totals
	1900-1901	1901-1902	1902-1903	1903-1904	1904-1905	1905-1906	Nine months ended Mar. 31, 1907	1907-1908	1908-1909	1909-1910	
British—											
English	9,331	12,783	32,087	36,003	48,847	65,135	41,156	90,380	37,019	40,416	413,157
Irish	933	1,311	2,236	3,128	3,998	5,018	3,404	6,547	3,609	3,940	34,124
Scotch	1,476	2,853	7,046	10,552	11,744	15,846	10,729	22,223	11,810	14,706	108,985
Welsh	70	312	423	691	770	797	502	1,032	463	728	5,788
Total British	11,810	17,259	41,792	50,374	65,359	86,796	55,791	120,182	52,901	59,790	562,054
African, South	.....	.....	.....	21	35	46	23	76	53	97	351
Arabian	98	70	46	58	48	19	31	50	4	14	438
Armenian	62	112	113	81	78	82	208	563	79	75	1,453
Australian	3	11	46	58	204	322	185	180	171	203	1,383
Austro-Hungarian	5,692	8,557	13,095	11,137	10,089	10,170	4,045	21,376	10,798	9,757	104,716
Brazilian	.....	.....	.....	2	1	2	5	1	4	.....	15
Bulgarian	.....	1	7	14	2	71	179	2,529	56	557	3,416
Chinese	7	2	.....	.....	.....	18	92	1,884	1,887	2,156	6,046
Doukhobor	.....	12	.....	.....	24	204	.....	.....	.....	.....	240
Dutch	25	35	223	169	281	389	394	1,212	495	741	3,964
East Indian	.....	.....	.....	.....	45	387	2,124	2,623	6	10	5,195
Egyptian	1	3	1	3	2	18	10	8	2	2	50
Finnish	682	1,292	1,734	845	1,323	1,103	1,049	1,212	669	1,457	11,366
French and Belgian	492	654	1,240	2,302	2,539	2,754	1,964	3,885	2,658	2,637	21,215
German	984	1,048	1,887	2,985	2,759	1,796	1,903	2,377	1,340	1,533	18,612
Greek	81	161	193	191	98	254	545	1,053	192	452	3,220
Hebrew	2,765	1,015	2,066	3,727	7,715	7,127	6,584	7,712	1,636	3,182	43,529
Italian	4,710	3,828	3,371	4,445	3,473	7,959	5,114	11,212	4,228	7,118	55,458
Japanese	6	.....	.....	.....	354	1,922	2,042	7,601	495	271	12,691
Malay	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	5
Maltese	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2
Menonite	.....	52	38	11	.....	.....	.....	.....	.....	.....	101
Negro	.....	.....	.....	.....	5	42	108	136	73	7	371
Newfoundland	.....	.....	335	519	190	340	1,029	3,374	2,108	3,372	11,267
New Zealand	.....	.....	2	23	57	89	30	70	65	82	418
Persian	.....	1	40	5	8	7	31	7	1	5	105
Polish	162	230	274	669	745	725	1,033	1,593	376	1,407	7,214
Portuguese	.....	.....	.....	.....	1	6	2	2	2	2	15
Roumanian	152	551	438	619	270	396	431	949	278	293	4,377
Russian	1,044	2,467	5,505	1,955	1,887	3,152	1,927	6,281	3,547	4,564	32,329
Scandinavian	1,750	2,451	5,448	4,203	4,118	3,859	2,296	4,073	2,082	3,782	34,062
Serbian	23	.....	2	10	7	19	4	48	31	76	220
Spanish	14	1	7	5	10	12	29	61	32	42	213
Swiss	30	17	73	128	150	172	112	195	129	211	1,217
Syrian	464	1,066	847	369	630	336	277	732	189	195	5,105
Turkish	37	17	43	29	30	357	232	489	236	517	1,987
U.S.A. Citizens, via ocean ports	68	73	.....	58	109	123	89	133	94	186	933
West Indian	.....	.....	23	55	77	194	90	278	159	203	1,079
Total Continental, etc.	19,352	23,732	37,099	34,786	37,364	44,472	34,217	83,975	34,175	45,206	394,378
From the United States	17,987	26,388	49,473	45,171	43,543	57,796	34,659	58,312	59,832	103,798	496,959
Total immigration	49,149	67,379	128,364	130,331	146,266	189,064	124,667	262,469	146,908	208,794	1,453,391

TABLE 3.—Statement of Immigration to Canada, for the Period April 1, 1910, to March 31, 1920

—	Fiscal Years										Totals
	1910-1911	1911-1912	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	1918-1919	1919-1920	
British—											
English	84,707	95,107	108,082	102,122	30,807	5,857	5,174	2,477	7,954	45,173	487,460
Irish	6,877	8,327	9,706	9,585	3,525	818	958	174	336	2,751	43,057
Scotch	29,924	32,988	30,735	29,128	8,346	1,887	2,062	473	1,518	10,997	148,058
Welsh	1,505	1,699	2,019	1,787	598	102	88	54	106	682	8,640
Total British	123,013	138,121	150,542	142,622	43,276	8,664	8,282	3,178	9,914	59,603	687,215
African, South	86	144	22	56	23	11	1	4	.....	23	370
Albanian	.....	.....	.....	3	4	.....	.....	.....	.....	.....	7
Arabian	3	2	10	16	.....	.....	.....	.....	.....	.....	31
Argentinian	.....	.....	.....	2	5	.....	.....	.....	.....	2	9
Armenian	20	60	100	139	36	.....	3	2	.....	10	370
Australian	266	184	106	106	51	32	18	34	35	88	920
Austro-Hungarian	16,285	21,651	21,875	28,323	7,150	15	1	.....	2	8	95,310
Belgian	1,563	1,601	1,826	2,651	1,149	172	126	19	48	1,532	10,687
Brazilian	13	.....	.....	5	.....	2	.....	.....	.....	.....	20
Bulgarian	1,068	3,295	4,616	1,727	4,048	1	.....	.....	.....	1	14,756
Chinese	5,278	6,247	7,445	5,512	1,258	88	393	769	4,333	544	31,867
Cuban	.....	.....	.....	10	1	1	3	1	.....	2	18
Doukhobor	41	24	108	4	.....	.....	.....	.....	.....	.....	177
Dutch	931	1,077	1,524	1,506	605	186	151	94	59	154	6,287
East Indian	5	3	5	88	.....	1	.....	.....	.....	.....	102
Egyptian	3	.....	7	5	.....	.....	.....	.....	.....	.....	15
Finnish	2,132	1,646	2,391	3,183	459	139	249	113	2	44	10,358
French	2,041	2,094	2,755	2,683	1,206	180	199	114	222	1,584	13,078
German	2,533	4,664	4,953	5,537	2,472	27	9	1	1	12	20,209
Greek	777	693	1,390	1,102	1,147	145	258	45	4	39	5,600
Hebrew	5,146	5,322	7,387	11,252	3,107	65	136	32	22	116	32,585
Italian	8,359	7,590	16,601	24,722	6,228	388	758	189	49	1,165	66,049
Japanese	437	765	724	856	592	401	648	883	1,178	711	7,195
Macedonian	.....	.....	.....	17	132	.....	.....	.....	.....	.....	149
Maltese	.....	.....	128	402	19	4	109	144	2	405	1,213
Mexican	.....	3	9	9	.....	.....	.....	1	3	.....	25
Montenegrin	.....	.....	36	13	9	.....	1	.....	.....	.....	59
Negro	12	138	211	266	202	34	98	35	22	61	1,079
Newfoundland	2,229	2,598	1,036	496	338	255	1,243	1,199	512	443	10,349
New Zealand	116	61	39	24	21	18	12	13	15	31	350
Persian	19	19	20	19	7	3	.....	2	2	.....	91
Polish	2,177	5,060	9,945	9,793	1,976	8	12	.....	4	76	29,051
Portuguese	13	6	9	58	8	.....	1	1	.....	3	99
Roumanian	511	793	1,116	1,504	361	4	4	.....	.....	21	4,314
Russian	6,621	9,805	18,623	24,485	5,201	40	25	42	42	51	64,935
Scandinavian—											
Danish	535	628	798	871	326	167	145	74	44	233	3,821
Icelandic	250	205	231	292	145	15	9	3	12	11	1,173
Norwegian	2,169	1,692	1,832	1,647	788	232	303	235	91	179	9,168
Swedish	3,213	2,394	2,477	2,435	916	177	332	156	101	241	12,442
Serbian	50	209	366	193	220	6	1	.....	1	12	1,058
Spanish	197	191	296	1,138	755	11	76	28	12	15	2,719
Swiss	270	230	246	269	209	42	30	12	11	100	1,419
Syrian	124	144	232	278	79	3	9	2	.....	18	889
Turkish	469	632	770	187	33	.....	5	.....	.....	1	2,097
U.S.A. Citizens, via ocean ports	203	143	121	121	41	15	20	28	21	55	768
West Indian	455	393	495	719	389	47	315	307	223	66	3,409
Others	.....	.....	.....	2	18	1	.....	.....	.....	20	41
Total Continental, etc	66,620	82,406	112,881	134,726	41,734	2,936	5,703	4,582	7,073	8,077	466,738
From the United States	121,451	133,710	139,009	107,530	59,779	36,937	61,389	71,314	40,715	49,656	821,490
Total immigration	311,084	354,237	402,432	384,878	144,789	48,537	75,374	79,074	57,702	117,336	1,975,443

TABLE 4.—Statement of Immigration to Canada, for the Period April 1, 1920, to March 31, 1925

—	Fiscal Years					Totals
	1920-1921	1921-1922	1922-1923	1923-1924	1924-1925	
British—						
English	47,687	23,225	19,188	37,030	26,466	153,596
Irish	6,384	3,572	3,668	9,719	9,379	32,722
Scotch	19,248	11,596	11,071	25,057	16,174	83,146
Welsh	943	627	581	1,113	1,159	4,423
Total British	74,262	39,020	34,508	72,919	53,178	273,887
African, South	63	32	41	60	87	283
Albanian	6	6	1	7	2	22
Arabian	8	5	2	.....	.....	15
Argentinian	4	.....	4	.....	.....	8
Armenian	85	70	59	486	304	1,004
Australian	90	76	67	112	162	507
Austrian	26	14	23	82	75	220
Belgian	1,645	503	316	1,662	1,300	5,426
Bermudian	8	2	7	4	4	25
Brazilian	.....	.....	.....	.....	1	1
Bulgarian	4	27	19	267	69	386
Chilian	.....	.....	.....	.....	3	3
Chinese	2,435	1,746	711	674	.....	5,566
Cuban	.....	.....	.....	1	.....	1
Czecho-Slovak	308	152	101	2,757	2,084	5,402
Dutch	595	183	119	1,149	1,637	3,683
East Indian	10	13	21	40	46	130
Egyptian	9	2	.....	3	3	17
Esthonian	.....	.....	12	51	49	112
Finnish	1,401	274	1,171	7,640	4,261	14,747
French	861	332	281	370	326	2,170
German	137	178	216	1,769	2,215	4,515
Greek	357	209	177	292	237	1,272
Hebrew	2,763	8,404	2,793	4,255	4,459	22,674
Hungarian	23	48	23	364	1,052	1,510
Italian	3,880	2,413	2,074	6,379	2,349	17,095
Jamaican	18	13	30	24	8	93
Japanese	532	471	369	448	501	2,321
Jugo-Slav	89	180	136	1,306	1,620	3,331
Latvian	.....	.....	1	11	20	32
Lettish	.....	.....	.....	6	2	8
Lithuanian	.....	19	106	236	125	486
Luxemburg	16	5	3	85	35	144
Maltese	140	34	57	148	26	405
Mexican	1	.....	.....	1	.....	2
Negro	144	42	42	42	39	309
Newfoundland	1,042	367	1,552	5,346	1,288	9,595
New Zealand	40	25	33	50	107	255
Persian	1	9	1	5	18	34
Polish	4,061	2,707	2,921	4,211	2,734	16,634
Portuguese	4	.....	2	.....	3	9
Roumanian	969	759	427	1,431	2,056	5,642
Russian	1,077	321	222	3,058	5,411	10,089
Scandinavian—						
Danish	511	541	382	1,355	1,830	4,619
Icelandic	50	31	21	27	49	178
Norwegian	429	480	507	2,424	2,550	6,390
Swedish	715	442	948	3,536	2,138	7,779
Spanish	202	6	15	39	3	265
Swiss	235	187	152	1,585	680	2,839
Syrian	443	123	91	286	210	1,153
Turkish	8	3	3	27	29	70
Ukrainian	491	89	36	832	26	1,474
U.S.A. Citizens, via ocean ports	110	67	32	134	96	439
Venezuelan	.....	.....	1	6	.....	7
West Indian	110	24	44	37	37	252
Total Continental, etc.	26,156	21,634	16,372	55,120	42,366	161,648
From the United States	48,059	29,345	22,007	20,521	15,818	135,750
Total immigration	148,477	89,999	72,887	148,560	111,362	571,285

TABLE 5.—Statement of Immigration to Canada, for the Period April 1, 1925, to March 31, 1928

—	Fiscal Years			Totals
	1925–1926	1926–1927	1927–1928	
British—				
English	19,689	24,890	25,991	70,570
Irish	5,993	9,187	8,756	23,936
Scotch	10,295	14,296	14,341	38,932
Welsh	1,053	1,411	1,784	4,248
Total British	37,030	49,784	50,872	137,686
Albanian	14	17	30	61
Arabian	10	4	6	20
Armenian	85	65	44	194
Austrian	75	401	606	1,082
Belgian	1,063	2,080	2,171	5,314
Bohemian	8	22	7	37
Bulgarian	47	126	249	422
Chinese	.....	2	.....	2
Croatian	1,006	1,085	902	2,993
Czech	805	721	714	2,240
Dalmatian	1	.....	.....	1
Dutch	1,180	1,674	1,928	4,782
East Indian	62	60	56	178
Esthonian	28	92	110	230
Finnish	1,617	5,180	4,765	11,562
French	498	548	868	1,914
German	7,356	12,540	12,032	31,928
Greek	217	340	583	1,140
Hebrew	3,587	4,471	4,296	12,354
Herzegovinian	.....	3	4	7
Italian	1,638	3,301	3,593	8,532
Japanese	421	475	478	1,374
Jugo-Slav	1,604	2,084	1,450	5,138
Korean	.....	1	.....	1
Lettish	24	60	77	161
Lithuanian	165	842	1,037	2,044
Magyar	4,112	4,863	5,318	14,293
Maltese	21	33	39	93
Mexican	.....	1	.....	1
Montenegrin	.....	5	.....	5
Moravian	6	36	33	75
Negro	53	51	88	192
Persian	11	6	4	21
Polish	2,535	6,505	6,733	15,773
Portuguese	3	14	7	24
Roumanian	265	292	237	794
Russian	925	1,127	948	3,000
Ruthenian	4,259	9,995	10,128	24,382
Scandinavian—				
Danish	1,112	2,030	3,835	6,977
Icelandic	53	30	28	111
Norwegian	1,072	3,384	4,327	8,783
Swedish	1,335	2,628	3,134	7,097
Serbian	454	885	411	1,750
Slovak	2,046	4,274	3,714	10,034
Spanish	12	29	28	69
Spanish-American	.....	6	.....	6
Swiss	320	568	614	1,502
Syrian	134	218	82	434
Turkish	17	8	4	29
Total Continental, etc.	40,256	73,182	75,718	189,156
From the United States	18,778	21,025	25,007	64,810
Total immigration	96,064	143,991	151,597	391,652

TABLE 6.—Statement of Immigration to Canada for the Fiscal Year 1927-28, showing Sex, Occupation, and Destination

—	Via Ocean Ports	From the United States	Totals
Sex—			
Adult males	69,508	12,696	82,204
Adult females	32,356	6,102	38,458
Children under eighteen	24,726	6,209	30,935
	126,590	25,007	151,597
Occupation—			
Farming class—			
Males	56,409	5,318	61,727
Females	5,686	1,276	6,962
Children	12,860	1,767	14,627
Labouring class—			
Males	4,364	1,784	6,148
Females	815	260	1,075
Children	1,402	279	1,681
Mechanics—			
Males	4,366	2,305	6,671
Females	1,397	546	1,943
Children	920	409	1,329
Trading class—			
Males	2,225	1,551	3,776
Females	988	588	1,576
Children	573	291	864
Mining class—			
Males	541	157	698
Females	102	17	119
Children	139	11	150
Female domestic servants	14,798	516	15,314
Other classes—			
Males	1,603	1,581	3,184
Females	8,570	2,899	11,469
Children	8,832	3,452	12,284
Destination—			
Nova Scotia	1,897	123	2,020
New Brunswick	1,282	224	1,506
Prince Edward Island	173	42	215
Quebec	14,635	3,834	18,469
Ontario	35,990	9,062	45,052
Manitoba	42,432	1,164	43,596
Saskatchewan	11,836	3,495	15,331
Alberta	10,895	4,578	15,473
British Columbia	7,426	2,465	9,891
Northwest Territories	23	16	39
Not given	1	4	5

TABLE 7.—Summary for the Fiscal Year 1927-28

Via Canadian ocean ports—			
Quebec	64,392		
Halifax	43,072		
St. John	14,176		
Vancouver	1,386		
North Sydney	832		
Victoria	475		
Montreal	272		
Sydney	7	124,612	
Via United States ocean ports—			
New York	1,641		
Boston	218	1,859	
Other ports	.....	119	
Via border ports, from the United States	.....	25,007	
Total	.....	151,597	

TABLE 8.—Statement of Immigration to Canada, for the Fiscal Year 1927-28, showing Racial Origin and Sex

Origin	Ocean Ports				International Boundary				Grand totals
	Adult males	Adult females	Children under eighteen	Totals	Adult males	Adult females	Children under eighteen	Totals	
Albanian	17	8	5	30	3	.....	.....	3	33
Arabian	1	2	3	6	1	.....	.....	1	7
Armenian	8	14	22	44	7	2	.....	9	53
Austrian	460	104	42	606	81	33	39	153	759
Belgian	1,055	564	552	2,171	45	16	17	78	2,249
Bohemian	5	2	.....	7	45	17	5	67	74
British—									
English	10,769	7,884	7,338	25,991	3,736	1,948	1,607	7,291	33,282
Irish	4,310	2,566	1,880	8,756	1,581	732	653	2,966	11,722
Scotch	5,331	5,117	3,893	14,341	1,540	667	649	2,856	17,197
Welsh	805	461	518	1,784	169	64	56	289	2,073
Bulgarian	209	27	13	249	2	.....	.....	2	251
Croatian	788	63	51	902	5	.....	.....	5	907
Czech	495	123	96	714	8	2	3	13	727
Dutch	1,042	371	515	1,928	278	141	118	537	2,465
East Indian	2	25	29	56	.....	.....	.....	.....	56
Esthonian	60	39	11	110	2	.....	.....	2	112
Finnish	2,723	1,680	362	4,765	69	27	16	112	4,877
French	491	251	126	868	999	718	1,421	3,138	4,006
German	6,971	2,748	2,313	12,032	1,680	760	750	3,190	15,222
Greek	417	120	46	583	48	10	14	72	655
Hebrew	1,392	1,707	1,197	4,296	265	127	78	470	4,766
Herzegovinian	4	.....	.....	4	.....	.....	.....	.....	4
Italian	2,101	715	777	3,593	116	33	41	190	3,783
Japanese	134	258	86	478	.....	.....	.....	.....	478
Jugo-Slav	1,259	124	67	1,450	11	3	5	19	1,469
Lettish	37	28	12	77	5	1	2	8	85
Lithuanian	698	271	68	1,037	9	3	3	15	1,052
Magyar	3,673	850	795	5,318	40	34	29	103	5,421
Maltese	16	11	12	39	1	.....	.....	1	40
Mexican	.....	.....	.....	.....	1	.....	.....	1	1
Moravian	14	8	11	33	1	1	.....	2	35
Negro	4	74	10	88	164	60	13	237	325
North American Indian	.....	.....	.....	.....	8	5	15	28	28
Persian	1	3	.....	4	.....	.....	.....	.....	4
Polish	4,585	1,349	799	6,733	117	65	72	254	6,987
Portuguese	4	3	.....	7	4	.....	.....	4	11
Roumanian	142	56	39	237	22	7	9	38	275
Russian	493	235	220	948	84	54	46	184	1,132
Ruthenian	7,030	2,090	1,008	10,128	38	16	7	61	10,189
Scandinavian—									
Danish	2,717	626	492	3,835	171	51	62	284	4,119
Icelandic	16	7	5	28	9	4	5	18	46
Norwegian	2,951	719	657	4,327	756	290	284	1,330	5,657
Swedish	2,340	482	312	3,134	463	155	139	757	3,891
Serbian	337	45	29	411	5	4	6	15	426
Slovak	3,135	354	225	3,714	12	4	4	20	3,734
Spanish	13	10	5	28	11	6	.....	17	45
Swiss	414	135	65	614	72	29	33	134	748
Syrian	39	25	18	82	11	12	8	31	113
Turkish	.....	2	2	4	1	1	.....	2	6
Total immigration	69,508	32,356	24,726	126,590	12,696	6,102	6,209	25,007	151,597

TABLE 9.—Comparative Statement.—Immigration to Canada, via Ocean Ports, by Months, for the Fiscal Year 1927-28, compared with that of the Fiscal Year 1926-27

—	1926-27				1927-28			
	Males	Females	Children	Totals	Males	Females	Children	Totals
April	9,416	3,129	2,941	15,486	22,550	5,213	5,160	32,923
May	9,269	4,003	3,285	16,557	13,019	4,643	3,776	21,438
June	4,725	2,914	2,375	10,014	7,859	4,003	3,548	15,410
July	8,593	3,113	2,324	14,030	4,452	3,309	2,426	10,187
August	7,220	2,439	1,735	11,394	3,186	2,586	1,847	7,619
September	5,191	2,972	2,256	10,419	2,555	2,615	1,637	6,807
October	3,141	2,979	2,094	8,214	2,251	2,989	1,910	7,150
November	2,567	2,138	1,705	6,410	1,361	1,739	1,065	4,165
December	1,869	1,427	1,061	4,357	1,158	1,289	835	3,282
January	1,472	1,005	782	3,259	1,027	902	540	2,469
February	2,709	1,088	786	4,583	1,426	890	542	2,858
March	13,591	2,441	2,211	18,243	8,664	2,178	1,440	12,282
Totals	69,763	29,648	23,555	122,966	69,508	32,356	24,726	126,590

TABLE 10.—Comparative Statement.—Immigration from the United States to Canada, by Months, for the Fiscal Year 1927-28, compared with that of the Fiscal Year 1926-27

—	1926-27				1927-28			
	Males	Females	Children	Totals	Males	Females	Children	Totals
April	1,071	466	470	2,007	1,338	569	611	2,518
May	1,052	527	484	2,063	1,302	602	599	2,503
June	1,051	571	555	2,177	1,259	681	702	2,642
July	1,153	546	498	2,197	1,060	529	512	2,101
August	1,513	534	505	2,552	1,480	588	555	2,623
September	1,038	475	477	1,990	1,114	542	598	2,254
October	805	485	509	1,799	1,136	572	575	2,283
November	652	342	317	1,311	825	434	480	1,739
December	492	291	275	1,058	612	342	330	1,284
January	448	225	232	905	652	320	251	1,223
February	445	255	238	938	697	378	379	1,454
March	1,029	463	536	2,028	1,221	545	617	2,383
Totals	10,749	5,180	5,096	21,025	12,696	6,102	6,209	25,007

TABLE 11.—Comparative Statement.—Total Immigration to Canada, by Months, for the Fiscal Year 1927-28, compared with that of the Fiscal Year 1926-27

—	1926-27				1927-28			
	Males	Females	Children	Totals	Males	Females	Children	Totals
April	10,487	3,595	3,411	17,493	23,888	5,782	5,771	35,441
May	10,321	4,530	3,769	18,620	14,321	5,245	4,375	23,941
June	5,776	3,485	2,930	12,191	9,118	4,684	4,250	18,052
July	9,746	3,659	2,822	16,227	5,512	3,838	2,938	12,288
August	8,733	2,973	2,240	13,946	4,666	3,174	2,402	10,242
September	6,229	3,447	2,733	12,409	3,669	3,157	2,235	9,061
October	3,946	3,464	2,603	10,013	3,387	3,561	2,485	9,433
November	3,219	2,480	2,022	7,721	2,186	2,173	1,545	5,904
December	2,361	1,718	1,336	5,415	1,770	1,631	1,165	4,566
January	1,920	1,230	1,014	4,164	1,679	1,222	791	3,692
February	3,154	1,343	1,024	5,521	2,123	1,268	921	4,312
March	14,620	2,904	2,747	20,271	9,885	2,723	2,057	14,665
Totals	80,512	34,828	28,651	143,991	82,204	38,458	30,935	151,597

TABLE 12.—Statement of Immigration, via Ocean Ports, showing

Country of Birth	Totals	Bohemian	Moravian	Slovak	Jewish	Arabian	English	Irish	Scotch	Welsh	Croatian	Herzegovinian	Serbian	Austrian	Belgian	Bulgarian	Czech	Finnish	French	German
Africa (British)	121				4		90	7	12											
Africa (not British)	16				1		7		2										4	1
Albania	28				1															13
Argentine	23				2		11		2						1				1	2
Armenia	7																			
Asia	20				7		2	3	4											2
Australia	259				2		200	10	26	1				1					1	1
Austria	1,306			2	9						43	4		583	2		2			649
Belgium	2,286						7							1	2,089			1	163	10
Brazil	14				1		7		1											1
Bulgaria	214			1												209				1
Canada	75				1		35	2	16	1								1	4	6
Chili	14						4	1	3											
China	141				4		73	3	27	4							2			2
Czecho-Slovakia	6,014	5	33	3,515	10			2			2			7			672			352
Denmark	3,831				1		2											1	1	29
England	24,054	1		2	182		22,980	226	430	159				1	4		1		5	14
Esthonia	129																	9		9
Finland	5,287			1			1								1			4,706	1	2
France	724				3	1	17	1	5						40			1	624	9
Germany	4,270	1			10		10	3						5			3		2	4,150
Greece	588															37				
Guiana (British)	15						5		1							1				1
Holland	1,551				1		1								12					7
Honduras (British)	2																			
Hungary	4,320			4	10									3	3		3		2	316
Iceland	28								1											
India (British)	240				2		142	11	24											
Ireland	8,232				3		146	8,006	73	3										
Italy	3,573			1			2				2			2	1					7
Japan	497						15		6											
Jugo-Slavia	4,189			148				2			853		296			2	3			1,181
Korea	2								1											1
Latvia	131				35															25
Lesser Isles	153						119	2	31										1	
Lithuania	1,407				211															163
Malta	51						10	1	1											
Mexico	10						2		2											2
Newfoundland	987						964	10	8										4	
New Zealand	163				2		117	10	30	1										1
Norway	4,258							1										2		1
Persia	4																			
Poland	19,300			2	2,438		1	7	2					2			21			1,713
Portugal	3						1												1	
Roumania	4,192			25	244			2			2		115		1		2		1	2,030
Russia	2,264			1	900		6		4									13		748
St. Pierre and Miquelon	1																		1	
Scotland	14,253				10		284	391	13,552	2										
South America	13						5		1	1										1
Spain	18						2		2										1	1
Sweden	2,563				2		1		1									10		1
Switzerland	793				1		2	1							3				20	183
Syria	81					5														
Turkey	52						3		1											
Ukraine	977				194												1			358
United States	385			12			87	17	36	3				1	14		4	21	5	18
Wales	2,220				4		554	32	19	1,608										
West Indies (British)	147						43	5	14	1									5	
West Indies (not British)	5						1												1	
Other European countries	49				1		9												17	20
Other countries (British)	27						18		3										2	
Other countries (not British)	13						5												1	1
Totals	126,590	7	33	3,714	4,296	6	25,991	8,756	14,341	1,784	902	4	411	606	2,171	249	714	4,765	868	12,032

Country of Birth, by Racial Origin, for the Fiscal Year 1927-28

Greek	Dutch	Magyar	Italian	Jugo-Slav	Polish	Roumanian	Russian	Danish	Icelandic	Norwegian	Swedish	Swiss	Ruthenian	Albanian	Esthonian	Lettish	Lithuanian	Maltese	Portuguese	Spanish	Negro	Armenian	East Indian	Japanese	Persian	Syrian	Turkish
1	3							2		1											1						
												1															
2	1						1							10													
			2					1												1							
																						7					
							1																			1	
11			1					5																			
		3	2	1	1							1	3								1						
	9		4										1							1							
			3			1																					
1				1																							1
			1		1		3			1	1													2			
	1											1								4							
							20	1		4									1								
1	1	610		22	7	1	7			9			747	7					2	2							
					1	1		3,771	1	8	5		9								1						
1	6		11		5	1	10	3		1	5	5	1														
								1		1	12				97												
					3		6	7		8	550		1														
			2		10			2		1		7														1	
	22	3	1		12	6	12	9				13	7				1										
545				4																							2
																					7						
	1,526				2						1	1															
								2																			
		3,949		1		1						1	25							2							
									27																		
	3					1		1															56				
										1																	
	1	1	3,553	2																						1	
																								476			
1		250		1,360		57	1						33					2									
					1		2							1		61	6										
				1	10		7	1		5			2			2	1,005										
			2															36								1	
	3																			1							
																					1						
					1			1																			
								10		4,220	24														4		
	1	4	1	1	6,573		372	1		1	7		8,125	6	4	10	8										
1		469		50	30	167	1						1,049	1	1			1	1								
	102	4		5	17		401				1		45		7	4	5					1					
	1		1				2			2		1					7										
	1																			2						2	
												1								11							
	1		1					7		25	2,513				1												
			2								1	580															
			1																			1				74	
11							1					1										33				1	1
	237				18		99				1		65	4													
8	5	25	3	2	40	1	2	9		37	12	1	15	1			5				1						
			2								1																
								1											3	3	71					1	
					1															1	1						
																						2					
																					4						
	4									2																	
583	1,928	5,318	3,593	1,450	6,733	237	948	3,835	28	4,327	3,134	614	10,128	30	110	77	1,037	39	7	28	88	44	56	478	4	82	4

TABLE 13.—Statement of Immigration, from the United States, showing

Country of Birth	Totals	Bohemian	Moravian	Slovak	Jewish	Arabian	English	Irish	Scotch	Welsh	North American Indian	Mexican	Croatian	Serbian	Austrian	Belgian	Bulgarian	Czech
Africa (British)	7				1		2		1									
Africa (not British)	4								1									
Albania	2																	
Argentine	6						1	3										
Armenia	3																	
Asia	8						6				1							
Australia	34						27	2	2									
Austria	175				17		1		1				3		82			3
Belgium	52															50		
Brazil	3						1											
Bulgaria	2																2	
Canada	962				6		265	129	183	3	1				3			1
Central America	1																	
China	12						6	1	1									
Czecho-Slovakia	25	6		7	1									1				7
Denmark	101						1											
England	1,515				27		1,424	18	23	10								
Esthonia	1																	
Finland	60																	
France	63						2											
Germany	224				4			3										
Greece	47																	
Guiana (British)	2								1									
Holland	51						2											
Hungary	81	1			7										3			
Iceland	3																	
India (British)	23				1	1	13	1	4									
Ireland	327				1		5	310	8									1
Italy	92						2											
Japan	4						4											
Jugo-Slavia	18	2											2	4				
Latvia	9				2													
Lesser Isles	5						3		1									
Lithuania	13				4													
Malta	2																	
Mexico	9						3					1						
Newfoundland	67						55	2	6									
New Zealand	5						3	1	1									
Norway	291						2											
Poland	148	1			42										9			
Roumania	58				10										1			
Russia	299			3	80		2		1									
Scotland	723				2		9	10	702									
South America	4						4											
Spain	2																	
Sweden	241						2		1									
Switzerland	50						1	1										
Syria	12																	
Turkey	10				2		1											
Ukraine	2				1													
United States	19,034	57	2	10	262		5,415	2,485	1,914	225	26			10	55	28		1
Wales	56						5		1	50								
West Indies (British)	40						19		2	1								
West Indies (not British)	6						3											
Other European countries	3																	
Other countries (British)	4						2		1									
Other countries (not British)	6								1									
Totals	25,007	67	2	20	470	1	7,291	2,966	2,856	289	28	1	5	15	153	78	2	13

Country of Birth, by Racial Origin, for the Fiscal Year 1927-28

Finnish	French	German	Greek	Dutch	Magyar	Italian	Jugo-Slav	Polish	Roumanian	Russian	Danish	Icelandic	Norwegian	Swedish	Swiss	Ruthenian	Albanian	Esthonian	Lettish	Lithuanian	Maltese	Portuguese	Spanish	Negro	Armenian	Syrian	Turkish
....	....	....	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....
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....	....	14	....	....	1	....	1	17	5	2	....	....	....	....	....	28	....	....	....	....	....	....	....	....	....	....	....
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....	285	56	....	4	2	2	....	2	....	....	2	1	6	3	1	3	....	....	....	....	....	....	....	4	....	....	....
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51	....	....	....	....	....	....	....	....	....	....	2	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	....
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....	....	28	....	....	2	....	1	....	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	96	....	10	....	....	....	3	....	93	....	....	....	....	....	6	....	1	....	2	....	....	....	....	2	....	....
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60	2,778	2,732	18	464	44	95	10	156	16	80	180	14	1,030	501	94	12	....	1	2	4	....	3	12	219	2	17	....
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112	3,138	3,190	72	537	103	190	19	254	38	184	284	18	1,330	757	134	61	3	2	8	15	1	4	17	237	9	31	2

TABLE 14.—Statement of Immigration, via Ocean Ports, for the Fiscal Year 1927-28, showing Racial Origin and Month of Arrival

—	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	9	2	2	.....	12	.....	.....	.....	.....	.....	.....	5	30
Arabian	.....	.....	.....	.....	5	.....	.....	.....	1	.....	.....	.....	6
Armenian	4	1	1	25	4	2	.....	.....	4	.....	2	1	44
Austrian	192	107	117	8	12	16	30	12	10	7	14	81	606
Belgian	688	487	174	179	68	99	99	37	42	17	54	227	2,171
Bohemian	4	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	7
British—													
English	6,603	4,067	3,021	2,476	2,045	1,796	1,833	944	439	450	513	1,804	25,991
Irish	2,018	1,596	1,352	993	592	545	538	219	106	92	151	554	8,756
Scotch	2,649	2,470	2,719	1,399	1,034	863	1,070	599	351	208	302	677	14,341
Welsh	533	275	180	164	120	111	134	54	41	21	36	115	1,784
Bulgarian	17	13	55	17	10	9	17	25	32	9	19	26	249
Croatian	484	144	10	5	4	2	26	9	8	5	6	199	902
Czech	332	82	10	26	34	14	8	6	36	13	28	125	714
Dutch	554	313	212	173	216	80	65	50	23	19	28	195	1,928
East Indian	4	4	11	4	12	8	2	2	3	3	.....	3	56
Esthonian	25	19	17	1	7	5	3	9	6	2	2	14	110
Finnish	608	839	641	486	375	403	390	216	269	126	157	255	4,765
French	128	139	98	82	53	83	83	51	48	13	26	64	868
German	2,577	1,966	1,275	883	730	461	662	314	288	261	326	2,295	12,032
Greek	55	37	40	47	24	55	67	50	62	34	55	57	583
Hebrew	384	302	454	381	382	344	409	339	401	349	234	317	4,296
Herzegovinian	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Italian	271	458	604	535	326	442	309	211	190	84	113	50	3,593
Japanese	57	77	49	45	32	25	26	23	24	17	22	81	478
Jugo-Slav	821	260	44	15	8	36	15	12	17	10	15	197	1,450
Lettish	19	11	12	10	3	1	5	2	2	4	.....	8	77
Lithuanian	375	110	60	36	32	30	46	14	28	55	25	226	1,037
Magyar	1,972	1,371	388	167	134	134	150	124	138	96	105	539	5,318
Maltese	1	2	13	4	5	2	1	1	.....	1	6	3	39
Moravian	8	8	5	9	.....	.....	.....	.....	.....	.....	.....	3	33
Negro	7	11	15	13	7	8	10	12	2	.....	3	.....	88
Persian	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Polish	2,486	1,403	920	358	225	151	215	135	156	98	108	478	6,733
Portuguese	1	.....	1	.....	2	.....	1	.....	.....	.....	.....	2	7
Roumanian	62	29	14	16	17	21	11	21	5	7	9	25	237
Russian	188	220	167	69	42	37	40	36	39	17	22	71	948
Ruthenian	3,109	1,759	1,310	524	346	334	367	228	269	206	189	1,487	10,128
Scandinavian—													
Danish	879	820	251	284	189	158	122	108	58	45	129	792	3,835
Icelandic	2	.....	8	2	3	6	.....	1	2	.....	4	.....	28
Norwegian	1,662	826	337	356	193	253	144	97	39	42	40	338	4,327
Swedish	689	501	357	266	232	165	131	117	100	99	76	401	3,134
Serbian	242	58	13	10	12	7	8	6	6	4	5	40	411
Slovak	2,036	486	379	52	30	61	67	61	26	35	24	457	3,714
Spanish	5	2	3	3	2	3	6	.....	.....	.....	3	1	28
Swiss	153	149	59	55	37	29	34	13	4	8	6	67	614
Syrian	4	16	11	9	2	7	6	6	7	11	1	2	82
Turkish	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	4
Totals	32,923	21,438	15,410	10,187	7,619	6,807	7,150	4,165	3,282	2,469	2,858	12,282	126,590

TABLE 15.—Statement of Immigration, via Ocean Ports, for the Fiscal Year 1927-28, showing Occupation, Month of Arrival, and Destination

Occupation and Destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	25,913	14,680	9,501	4,784	3,145	2,150	1,867	966	859	722	1,231	9,137	74,955
Labouring class	1,084	1,004	837	707	531	480	556	351	251	201	196	383	6,581
Mechanics	1,113	1,015	788	682	500	473	504	375	281	237	232	483	6,683
Trading and clerical classes	541	498	402	412	306	381	353	224	146	141	153	229	3,786
Mining class	126	105	78	77	56	77	85	47	54	25	14	38	782
Female domestic servants	2,139	1,962	1,851	1,601	1,139	1,196	1,567	881	592	423	450	997	14,798
Other classes	2,007	2,174	1,953	1,924	1,942	2,050	2,218	1,321	1,099	720	582	1,015	19,005
Totals	32,923	21,438	15,410	10,187	7,619	6,807	7,150	4,165	3,282	2,469	2,858	12,282	126,590
Nova Scotia	362	350	272	148	150	116	131	94	75	49	49	101	1,897
New Brunswick	231	276	288	109	24	62	38	34	68	24	35	93	1,282
Prince Edward Island	31	44	45	24	1	6	8	6	3	3	.....	2	173
Quebec	2,253	2,167	1,727	1,431	1,159	1,234	1,366	883	574	485	452	904	14,635
Ontario	6,461	5,719	4,502	3,738	2,707	2,729	3,066	1,700	1,354	890	997	2,127	35,990
Manitoba	16,819	8,255	4,410	1,976	1,557	871	799	392	353	298	506	6,196	42,432
Saskatchewan	2,859	1,833	1,634	1,066	749	636	569	335	333	294	281	1,247	11,836
Alberta	2,510	1,686	1,695	959	690	586	603	347	301	246	287	985	10,895
British Columbia	1,396	1,101	830	736	580	565	570	374	221	180	251	622	7,426
Northwest Territories	1	6	7	.....	2	2	.....	.....	.....	.....	.....	5	23
Not given	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals	32,923	21,438	15,410	10,187	7,619	6,807	7,150	4,165	3,282	2,469	2,858	12,282	126,590

TABLE 16.—Statement of Immigration from the United States for the Fiscal Year 1927-28, showing Racial Origin and Month of Arrival

—	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian		1			1		1						3
Arabian								1					1
Armenian	1	2	2	2		2							9
Austrian	29	10	17	26	18	9	12	15	3	3		11	153
Belgian	5	15	8	3	13	6	4	2	9	4	5	4	78
Bohemian	14	10	6	1	6	4	4	5	5	6	1	5	67
British—													
English	726	773	732	620	843	685	615	514	352	378	415	638	7,291
Irish	273	300	329	230	314	265	278	212	153	170	152	290	2,966
Scotch	281	279	320	225	316	290	292	171	143	126	151	262	2,856
Welsh	27	36	29	32	22	22	32	19	16	24	9	21	289
Bulgarian						2							2
Croatian	1		1	2			1						5
Czech	1		1	2	6	1				1		1	13
Dutch	66	52	54	36	53	68	53	33	36	17	13	56	537
Esthonian					1						1		2
Finnish	17	13	17	7	8	1	17	4	18	2	4	4	112
French	319	361	308	275	272	253	266	238	156	176	220	294	3,138
German	299	255	325	239	371	290	329	219	186	140	190	347	3,190
Greek	4	8	7	5	5	8	1	4	2	4	18	6	72
Hebrew	31	45	56	43	44	42	43	33	29	28	40	36	470
Italian	13	24	25	11	6	14	10	18	17	15	16	21	190
Jugo-Slav	5	2	1	1		3		1	3			3	19
Lettish		1	1		4	1						1	8
Lithuanian	4	1	1	1	3		1	1		2		1	15
Magyar	10	10	18	3	22	2	7	7	5	3	5	11	103
Maltese								1					1
Mexican		1											1
Moravian			1	1									2
Negro	10	38	31	33	20	13	26	13	18	15	9	11	237
North American Indian	3		3	1		4	12	2	1	1	1		28
Polish	35	23	23	22	24	28	16	20	6	3	17	37	254
Portuguese			1		1						1	1	4
Roumanian	2	2	1	8	4	3	3			2	6	7	38
Russian	10	15	33	26	5	31	20	6	6	7	11	14	184
Ruthenian	12	7	8	9	5	3	6		3	1	5	2	61
Scandinavian—													
Dapish	32	30	36	22	25	17	18	15	16	15	15	43	284
Icelandic				4		3	3	6			1	1	18
Norwegian	182	114	136	125	101	107	135	105	64	36	81	144	1,330
Swedish	84	58	78	73	89	51	65	55	22	37	60	85	757
Serbian	4			1		8	2						15
Slovak	1	2	6	2		2	1				1	5	20
Spanish	4	3	2		1		1	4	1	1			17
Swiss	10	11	24	8	18	13	6	12	6	4	4	18	134
Syrian	3	1	1	1	2	3	3	3	8	2	2	2	31
Turkish				1								1	2
Totals	2,518	2,503	2,642	2,101	2,623	2,254	2,283	1,739	1,284	1,223	1,454	2,383	25,007

TABLE 17.—Statement of Immigration from the United States for the Fiscal Year 1927-28, showing Occupation, Month of Arrival, and Destination

—	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	1,081	695	742	721	1,175	739	692	497	299	229	415	1,076	8,361
Labouring class	211	279	282	221	169	188	215	180	168	124	117	169	2,323
Mechanics	320	367	390	291	258	293	282	249	148	190	189	283	3,260
Trading and clerical classes	191	257	266	201	194	213	259	184	151	180	154	180	2,430
Mining class	17	12	19	22	14	16	17	6	23	6	9	24	185
Female domestic servants	57	52	76	60	37	33	54	34	28	27	23	35	516
Other classes	641	841	867	585	776	772	764	589	467	467	547	616	7,932
Totals	2,518	2,503	2,642	2,101	2,623	2,254	2,283	1,739	1,284	1,223	1,454	2,383	25,007
Nova Scotia	9	16	6	17	12	12	17	12	4	9	2	7	123
New Brunswick	32	40	22	21	13	12	16	28	10	15	4	11	224
Prince Edward Island	5	1	6	2	7	6	8	3	1	3			42
Quebec	364	430	410	320	311	362	334	242	216	231	280	334	3,834
Ontario	789	981	1,044	696	797	811	877	705	552	577	530	703	9,062
Manitoba	124	127	127	96	158	114	112	79	43	37	64	83	1,164
Saskatchewan	453	321	298	329	470	328	300	238	118	71	144	425	3,495
Alberta	468	385	453	375	620	421	399	223	182	153	281	618	4,578
British Columbia	273	200	271	239	235	188	220	208	158	127	149	197	2,465
Northwest Territories	1	2	4	6				1				2	16
Not given			1									3	4
Totals	2,518	2,503	2,642	2,101	2,623	2,254	2,283	1,739	1,284	1,223	1,454	2,383	25,007

TABLE 18.—Statement of Immigration, via Ocean Ports, showing Destination by Intended Occupation and Sex, for the Fiscal Year 1927-28

Destination	Totals	Farming Class				Labouring Class				Mechanics				Trading and Clerical Classes				Mining Class				Female Domestics		Other Classes			
		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over	Under 18 years	18 years and over		Under 18 years	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	M.	F.
Nova Scotia	1,897	283	81	166	80	194	10	20	9	77	12	20	8	36	17	7	10	63	19	28	22	225	72	35	167	105	131
New Brunswick	1,282	354	121	260	156	35	6	3	2	29	5	5	4	12	4	1	1	17	5	10	5	80	29	14	53	41	30
Prince Edward Island	173	54	20	17	36	4	....	....	....	5	2	1	2	.....	1	....	....	....	....	....	....	7	1	3	8	7	5
Quebec	14,635	3,375	267	1,129	169	1,084	137	163	85	1,218	381	113	105	784	239	98	68	41	7	1	3	1,972	159	453	1,358	603	623
Ontario	35,990	9,094	1,136	2,095	698	2,038	374	440	258	2,142	717	254	214	911	478	140	123	218	38	19	16	5,482	582	635	3,822	2,096	1,970
Manitoba	42,432	32,260	1,924	1,958	1,247	272	42	62	58	309	66	25	23	154	59	17	27	6	1	1	....	2,294	204	105	662	300	356
Saskatchewan	11,836	4,940	902	1,320	790	84	13	38	32	96	38	19	14	53	22	9	3	5	....	....	....	1,418	174	72	852	498	444
Alberta	10,895	4,347	865	1,233	800	109	28	55	24	130	42	12	11	60	36	4	7	102	15	14	9	1,174	138	71	753	436	420
British Columbia	7,426	1,698	368	431	274	543	205	92	61	350	134	46	44	215	132	33	25	88	17	6	5	717	70	212	893	396	371
Northwest Territories	23	3	2	.....	1	1	....	....	....	10	.....	....	....	.....	....	....	....	1	....	....	....	.....	.....	3	2	.....	.....
Not given	1	1	.....	.....	.....	.....	....	....	....	.....	.....	....	....	.....	....	....	....	....	....	....	....	.....	.....	.....	.....	.....	.....
Totals	126,590	56,409	5,686	8,609	4,251	4,364	815	873	529	4,366	1,397	495	425	2,225	988	309	264	541	102	79	60	13,369	1,429	1,603	8,570	4,482	4,350

TABLE 19.—Statement of Immigration, from the United States, showing Destination by Intended Occupation and Sex, for the Fiscal Year 1927-28

Destination	Totals	Farming Class				Labouring Class				Mechanics				Trading and Clerical Classes				Mining Class				Female Domestics		Other Classes			
		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over	Under 18 years	18 years and over		Under 18 years	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	M.	F.
Nova Scotia	123	15	2	3	2	10	1	....	....	10	1	....	....	4	....	....	....	2	....	....	....	4	.....	8	20	18	23
New Brunswick	224	13	5	5	3	47	3	....	1	14	3	3	....	10	....	....	....	....	....	....	....	10	.....	13	21	37	36
Prince Edward Island	42	10	4	3	4	1	1	....	....	2	1	....	1	.....	....	....	....	....	....	....	....	1	.....	2	2	7	3
Quebec	3,834	196	39	50	36	344	48	34	22	407	100	56	43	297	101	33	30	8	....	....	....	96	7	274	540	534	539
Ontario	9,062	764	111	81	81	968	144	77	58	1,356	280	92	94	853	307	72	58	51	7	3	1	133	13	874	1,257	656	671
Manitoba	1,164	330	79	54	46	94	13	4	5	100	31	7	9	80	34	11	7	4	....	....	....	18	2	59	96	37	44
Saskatchewan	3,495	1,604	349	300	253	32	5	8	4	63	19	12	10	43	20	8	11	1	....	....	....	73	9	64	293	188	126
Alberta	4,578	2,079	571	381	320	70	10	8	13	106	28	7	17	65	30	7	5	16	4	3	1	104	18	90	317	153	155
British Columbia	2,465	306	116	82	63	217	35	27	18	246	83	24	34	199	96	27	22	64	5	1	2	26	2	196	350	111	113
Northwest Territories	16	.....	.....	.....	.....	1	....	....	....	1	.....	....	....	.....	....	....	....	11	1	....	....	.....	.....	.....	2	.....	.....
Not given	4	1	.....	.....	.....	.....	....	....	....	.....	.....	....	....	.....	....	....	....	....	....	....	....	.....	.....	1	1	1	.....
Totals	25,007	5,318	1,276	959	808	1,784	260	158	121	2,305	546	201	208	1,551	588	158	133	157	17	7	4	465	51	1,581	2,899	1,742	1,710

TABLE 20.—Statement of Immigration for the Fiscal Year 1927-28, showing Nationality and Sex

Nationality	Totals	Via Ocean Ports				Totals	From the United States			
		18 years and over		Under 18 years			18 years and over		Under 18 years	
		M.	F.	M.	F.		M.	F.	M.	F.
African (not British)						1	1			
Albanian	12	6	2	3	1	2	2			
Arabian	8	5	3							
Argentinian	9	3	3	1	2	2	2			
Armenian	5	2	2		1	1		1		
Austrian	1,320	1,026	199	52	43	69	39	29		1
Belgian	2,317	1,115	615	310	277	30	23	6	1	
Brazilian	2	2				1			1	
British	51,552	21,477	15,552	8,479	6,044	2,696	1,607	836	132	121
Bulgarian	253	210	29	7	7	1	1			
Chilian	6	2	1		3					
Columbian	1			1						
Cuban	1			1						
Czecho-Slovak	6,025	4,978	601	246	200	10	7	2	1	
Danish	3,831	2,714	613	276	228	54	45	7	2	
Dutch	1,593	952	267	219	155	32	19	8	4	1
Esthonian	133	76	44	8	5					
Finnish	5,313	3,067	1,749	265	232	27	14	10	3	
French	635	386	162	49	38	39	28	11		
German	4,716	3,078	879	397	362	113	77	30	4	2
Greek	551	404	103	29	15	10	7	3		
Hungarian	4,357	2,930	696	387	344	40	20	18	1	1
Icelandic	30	17	7	3	3	4	3	1		
Italian	3,546	2,072	674	527	273	28	19	7	2	
Japanese	462	132	243	54	33					
Jugo-Slav	4,193	3,252	515	225	201	12	10	2		
Latvian	109	42	50	7	10	7	6	1		
Lithuanian	1,411	884	390	67	70	7	3	2	1	1
Luxemburg	31	25	4	1	1					
Mexican	6			4	2	5	1	1	2	1
Norwegian	4,314	2,944	681	397	292	118	86	31		1
Paraguayan	2			2						
Persian	3	1	2							
Polish	18,958	11,392	4,519	1,602	1,445	109	73	31	4	1
Porto Rican						1			1	
Roumanian	4,173	2,657	859	342	315	35	23	11		1
Russian	2,932	940	886	595	511	141	74	55	6	6
Spanish	8	6	2			1	1			
Swedish	2,552	1,977	289	180	106	100	77	20	2	1
Swiss	788	548	166	37	37	40	26	11	1	2
Syrian	106	41	26	21	18	6	3	2		1
Turkish	7		3	4						
Ukrainian	209	105	73	18	13	5	2	3		
U. S. A. citizens	108	40	18	30	20	21,260	10,397	4,912	3,057	2,894
Venezuelan	2			1	1					
Totals	126,590	69,508	30,927	14,847	11,308	25,007	12,696	6,051	3,225	3,035

TABLE 21.—Immigration, from the United States, showing State of last residence, by Intended Occupation and Sex, for the Fiscal Year 1927-28

State of Last Residence	Totals	Farming Class				Labouring Class				Mechanics				Trading and Clerical Classes				Mining Class				Female Domestics		Other Classes			
		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over	Under 18 years	18 years and over		Under 18 years	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	M.	F.
Alabama	27	4	1					1		8	6	2		1										2	1		1
Alaska	54	7	3	2	4	2				1				3	5	1	2	13				3		1	3	1	3
Arizona	36	4				3	1			7	2		1					1						6	5	2	4
Arkansas	45	15	3	4	3	1	1			1				1	2									4	6	1	3
California	1,366	294	99	65	48	59	11	4	1	157	50	7	21	94	40	13	7	9	1			16	4	87	159	69	51
Colorado	111	32	15	17	8	3	1			3	1			10	3		1					1	1	4	10	1	
Connecticut	279	26	5	4	3	19	2	4	2	24	9	3	4	16	15	2	5					3		19	28	51	35
Delaware	11	1	1			1				2	1	1		1											1		2
District of Columbia	32					3				4	1	1		4	5	2	2					2		2	5	1	
Florida	124	17	8	4	1	4	1			18	6	3		11	5		1					1		10	18	9	7
Georgia	48	8				6	1		1	2				6	4							3		10	5		2
Hawaii	1																								1		
Idaho	316	97	36	35	24	8	1	1	1	10	2			7	1			7				4		18	27	24	13
Illinois	1,120	221	69	33	25	78	13	4	6	117	23	8	4	84	34	9	9	11	1			22		97	134	50	68
Indiana	248	49	13	6	5	11	3	1	1	24	4	3		20	9	2	1					7		23	32	20	14
Iowa	421	184	42	31	19	9	2	3		17	5		1	9	7	3		1				8	2	11	34	20	13
Kansas	173	58	17	11	11	6				22	4	2	1	9	2				1			2	1	5	17	1	3
Kentucky	337	175	8	16	13	9			1	17	1			13	8	5	2	1	1			1	3	8	21	19	15
Louisiana	22					2				4	1			2	2	1	1							4	5		
Maine	549	44	10	12	15	80	6	2	3	30	6	2	3	21	6	2	2	1				11		18	90	84	101
Maryland	114	4		2		6	1	1	1	15	6	4	7	7	1							1		25	17	8	8
Massachusetts	1,348	99	23	25	16	86	14	7	8	130	31	26	13	88	22	7	2	1				57	5	95	182	200	211
Michigan	3,992	593	109	51	68	415	40	26	15	548	98	35	32	339	115	22	15	27	1			73	5	281	476	296	312
Minnesota	1,774	574	125	118	110	143	18	15	15	106	21	8	12	67	27	15	9	4				32	7	63	149	64	72
Mississippi	4	1								2													1				
Missouri	221	59	16	8	11	8	2			10	4			22	8	3	3					6	1	16	26	10	8
Montana	581	197	61	59	39	14	1		2	28	8	4	9	10	6	1	6	10	2	3	1	8	1	17	43	33	18
Nebraska	307	129	35	31	24	3				6	2		2	4	2	2		1				4		11	30	8	13
Nevada	17	7	1								1			1	1			1				1		1	2		1
New Hampshire	343	26	4	9	1	34	8	8	3	27	9	2	5	13	6		1	1				11	1	14	55	45	60
New Jersey	267	25	6	2	1	21	4			41	11	1	2	25	11	2	2	1				3		30	40	18	21
New Mexico	17	4	2	2	4					2					1			1							1		
New York	2,779	212	33	26	22	248	53	22	21	353	79	22	28	300	103	31	27	10	1			52	3	291	459	205	178
North Carolina	153	99	2	2	9	12	1	1		4	1	1	2	1								1		8	5	1	3
North Dakota	1,154	512	104	95	104	24	6	4	2	29	4	1	2	9	3	1	1	1	1			31	6	13	85	71	45
Ohio	882	105	23	17	10	77	8	7	3	124	29	18	3	69	33	9	6	5	1			12		84	129	63	47
Oklahoma	79	26	4	5	4	7	2			6	1			1	1							2	1	4	9	4	2
Oregon	692	235	78	43	32	32	2	3		28	10	1	2	25	13	2	4	1				12	2	27	66	36	38
Pennsylvania	752	85	13	17	4	73	11	6	6	121	27	11	11	56	17		3	11	2	2		8	1	60	97	49	61
Rhode Island	363	42	3	9	5	25	3	6	1	30	11	3	5	12	2	3	3					9	1	12	44	67	67
South Carolina	20	4				2	1			1	1				1							1		6	3		
South Dakota	239	96	25	26	20	1	1		1	8	2	2	2	4	2	1	1					9	1	5	19	6	7
Tennessee	67	11				7	1			8	3			6										5	12	9	5
Texas	82	14	3	1		5	2			3	2			9	2							2		10	13	8	8
Utah	115	20	9	8	10	1				6				2				1				2		30	17	2	7
Vermont	277	27	6	2		23	4	3	2	28	8	7	4	13	5	1	2					6		7	27	57	45
Virginia	198	85	8	10	6	9	1	1		12	4	3	3	5	4		1					2		13	13	12	6
Washington	1,984	542	191	102	75	136	24	23	20	107	34	13	16	108	41	12	11	35	4	2	3	27	3	80	199	75	101
West Virginia	48	11	3	1	1	6				3				2										3	8	3	7
Wisconsin	574	157	38	31	30	51	9	4	5	37	11	6	12	25	9	4	3	2				8	1	28	52	32	19
Wyoming	70	28	11	7	3	2				5	4	1	1	2	1				1					2	2		
Not given	174	53	10	10	20	9		1		9	2			14	3	2						1		11	17	7	5
Totals	25,007	5,318	1,276	959	808	1,784	260	158	121	2,305	546	201	208	1,551	588	158	133	157	17	7	4	465	51	1,581	2,899	1,742	1,710

TABLE 22.—IMMIGRATION, via Ocean Ports, showing Age Groups by Racial Origin and Literacy, for Fiscal Year 1927-28

Racial Origin	10 to 17 years				18 to 29 years				30 to 49 years				50 years and over			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.
Albanian	4		2	1	11		2		6		2	2				
Arabian			1		1			1								
Armenian	11		9		5		7		2		3		1		1	1
Austrian	10		9		331	1	63		125	1	35		2		3	
Belgian	79	1	63		577	10	326	1	408	18	200	9	38	4	20	4
Bohemian					5		2									
British—																
English	2,729	3	1,083	4	6,692	4	3,507	1	3,542	4	3,261	5	527		760	7
Irish	467	1	343	1	2,931	2	1,581	2	1,224		734		150	3	130	3
Scotch	1,151	4	710		3,485		2,873	1	1,536	3	1,634	1	307		362	2
Welsh	164		88		484		207		298	1	192		22		26	
Bulgarian	5		3		117		20		88		4		4			2
Croatian	10		3		529		36	3	259		19	3				
Czech	17		14		326	1	86	2	165		25		3		2	
Dutch	120	1	63		741		190		274	1	151		25	1	17	1
East Indian	19	2		2	1		6	12	1			7				
Esthonian	1		2		33		23		25		14		2		2	
Finnish	117	1	101		1,872	3	1,147	2	805	2	425	2	41		24	
French	19		21		288	2	122	2	180	2	103		19		18	1
German	415	5	333	6	4,568	4	1,703	4	2,252	3	790	10	141	3	100	8
Greek	27	2	9	5	292	3	80	5	104	1	15	4	17		4	6
Hebrew	378	5	289	7	931		1,030	12	341		322	42	107	13	144	78
Herzegovinian					3				1							
Italian	350	2	110	1	1,467	2	401	11	557	1	192	22	67	7	37	19
Japanese	39		26		108		197		24		56	2	2		1	
Jugo-Slav	13		10	2	789		78	2	467		32	6	3		2	
Lettish	2		3		24		14		12		10		1		2	
Lithuanian	4	1	8		485		209	1	210		56		3			2
Magyar	97		83	1	1,878	1	493		1,774	1	318		18	1	17	1
Maltese	2		4		13		8	1	3		1	1				
Moravian	6		1		9		4		5		3					
Negro	5		5		4		47				23					
Persian							3		1							
Polish	126	5	110	13	2,976	6	953	19	1,570	3	265	25	28	2	20	8
Portuguese					2		2		2		1					
Roumanian	12		8		58		26	1	80	1	22	2	3		4	
Russian	48		63	4	288		100	4	182	2	76	15	20	1	13	2
Ruthenian	243	11	160	10	4,622	18	1,534	43	2,356	11	317	67	20	3	17	16
Scandinavian—																
Danish	116		62		2,128		393		557		202		32		12	
Icelandic	2		1		12		3		4		2				1	
Norwegian	171		94	1	2,132	1	396	1	762		257		56		32	
Swedish	129		57		1,734		314		561	1	115		44		16	
Serbian	4		2		172		26	1	162		17	1	3			
Slovak	28	1	19		2,020	6	253		1,105	1	89		3		4	1
Spanish	2				7		6		6		4					
Swiss	13		7		309		83		96		45		9		6	
Syrian	5		7	1	26		15	2	13		2				1	2
Turkish			1				1				1					
Totals	7,160	45	3,987	59	45,486	64	18,570	134	22,145	57	10,035	226	1,718	38	1,798	164

TABLE 23.—IMMIGRATION, from the United States, showing Age Groups by Racial Origin and Literacy, for Fiscal Year 1927-28

Racial Origin	10 to 17 years				18 to 29 years				30 to 49 years				50 years and over			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.	Lit.	Ill.
Albanian									2				1			
Arabian										1						
Armenian					4		1		2				1			1
Austrian	6		9		23		11	1	45	1	17		12		4	
Belgian	2		2		15		7		20		6		10		2	1
Bohemian	1		2		29		9		12		3		4		5	
British—																
English	246	2	201	1	1,533	2	778	3	1,684	5	875		510	2	272	1
Irish	89		81		648	1	296	1	727	1	351		202	2	79	1
Scotch	97		80		565	1	242		740	1	286		233		136	
Welsh	11		10		54		22		94		36		21		6	
Bulgarian									1	1						
Croatian									3				2			
Czech					2		1		5		1		1			
Dutch	25		15		101		59		123		62		54		19	
Esthonian									2							
Finnish	3		4		31		13		33		12		5		1	
French	126	7	152	8	466	3	400	2	404	2	241	2	121	3	63	3
German	129		122		748	1	335	2	702	3	323	1	226		94	1
Greek	1	2		1	10	1	3	2	35	1	4	1	1			
Hebrew	12		10		112		70		123		43	1	30		12	1
Italian	3		7		48		20		60		11		8			
Jugo-Slav	1		2		4		1		6		2		1			
Lettish	1		1				1		4				1			
Lithuanian			1		1		1		7		1		1		1	
Magyar	2		3		13		17		18		10		9		5	1
Maltese					1											
Mexican									1							
Moravian							1						1			
Negro	1		3		75		30		77		22		12		8	
North American Indian	3		1	1	6				2		5					
Polish	11		10		48		44		57		17		12		3	1
Portuguese					2				2							
Roumanian	3		2		8		3		12		2	1	2		1	
Russian	1		6		22		21		50		24		12		8	
Ruthenian	2				14		7		22		6		2		2	1
Scandinavian—																
Danish	11		7		64		20		85		26		22		3	
Icelandic					3		3		5		1		1			
Norwegian	51		47	1	310		112		335	2	136		109		37	
Swedish	28		14		195		71		202		68		66		15	
Serbian	1		2				2		3		1		2		1	
Slovak	4				3		1		7		2		2		1	
Spanish					5		3		5		3		1			
Swiss	7		3		31		6		27		18	1	14		4	
Syrian	2		4		4		9		7		3					
Turkish									1						1	
Totals	880	11	801	12	5,198	9	2,620	11	5,752	18	2,618	7	1,712	7	783	12

TABLE 24.—Immigration, via Ocean Ports, showing Language of Immigrants,

Racial Origin	French	English	German	Norwegian	Swedish	Icelandic	Flemish	Dutch	Danish	Finnish	Esthonian	Lettish	Lithuanian	Russian
Albanian											1			
Arabian														
Armenian	1	3												
Austrian	1	12	535					1	1					
Belgian	146	11	12				1,579	10						
Bohemian		1	1											
British—														
English		22,128												
Irish		7,572												
Scotch		12,069												
Welsh		1,482												
Bulgarian														
Croatian			51											
Czech	1	3	19											7
Dutch	2	47	200		1		3	1,283						48
East Indian		1												
Esthonian		1	4		5					1	69		2	20
Finnish		3	3	1	132				7	4,381	6			1
French	715	39	11				11							
German	16	53	9,552	1	2		1	8	11				11	231
Greek	3	8												
Hebrew	7	230	112		1			1		3		2	14	53
Herzegovinian														
Italian	3	25	2				1							
Japanese		2												
Jugo-Slav		2	84										1	
Lettish		2	3								1	43	1	16
Lithuanian	2	7	23								1	1	897	35
Magyar	1	7	118											3
Maltese		13												
Moravian														
Negro		83												
Persian		2												
Polish	1	9	107					2				1	2	92
Portuguese		5												
Roumanian	2	2	35											7
Russian	9	30	79		1			5		4			5	554
Ruthenian	1	3	63					1		2			3	139
Scandinavian—														
Danish	1	63	19	7	4			1	3,379	8	20			
Icelandic		2				22			1					
Norwegian	2	58	4	3,798	22				3	7				
Swedish		31	8	19	2,878				5	30				
Serbian		1	23											
Slovak	1	11	39					1						1
Spanish	1	7					1							
Swiss	165	30	361				1	4						
Syrian	1	3												
Turkish	2													
Totals	1,084	44,061	11,468	3,826	3,046	22	1,597	1,317	3,407	4,436	98	47	936	1,724

10 Years and Over, by Racial Origin, for the Fiscal Year 1927-28

Yiddish	Hebrew	Ruthenian Russniak Ukrainian	Polish	Roumanian	Slovenian	Croat (Serbian)	Czech (Bohemian)	Hungarian (Magyar)	Italian	Spanish	Portuguese	Greek	Albanian	Turkish	Bulgarian	Japanese	East Indian	Armenian (Aramaic)	Syrian (Arabic)
			1									3	24	1					
																			3
																		35	1
							1	29											
						1	4												
									1										
							1					3			239				
					31	777	2		1										
	1	25	5		1	8	541	30											
							1												
																	49		
			8																
															1				
		15	213	74	3	45	26	82		1									
		1				3						502			57				
330	1,804	13	565	36			1	10			1								
						4													
									3,213			2							
																453			
			1	2	152	998	114	44				4			2				
			1	1															
		2	9	1															
				7		14	60	4,473											
						3			17										
							28												
										1									
																		2	
	47	164	5,701				2	1											
											2								
		16	1	119	1	5		29											
	9	6	115					1											
1	31	6,903	2,124	47	23	14	49	43		1									
							9												
				6		350	2	6											
		12	1	1	1	131	3,276	54							1				
								1		15									
									7										
																		1	69
															1				
331	1,892	7,157	8,745	294	212	2,353	4,117	4,803	3,239	18	3	514	24	1	301	453	49	38	73

TABLE 25.—Immigration, from the United States, showing Language of

Racial Origin	French	English	German	Norwegian	Swedish	Icelandic	Flemish	Dutch	Danish	Finnish	Lettish	Lithuanian
Albanian		1										
Arabian												
Armenian		6										
Austrian	1	88	9									
Belgian	4	36					25					
Bohemian		59	2									
British—												
English	1	6,114										
Irish		2,479										
Scotch		2,380			1							
Welsh		254										
Bulgarian		2										
Croatian		3										
Czech	2	6										
Dutch		428	5					24				
Esthonian		2										
Finnish	1	67								34		
French	878	1,123	2									
German		2,451	230	1								
Greek		20										
Hebrew		292	6								1	
Italian	1	87										
Jugo-Slav		11										
Lettish		5									3	
Lithuanian		3										9
Magyar		45	3									
Maltese												
Mexican												
Moravian		2										
Negro		228										
North American Indian		18										
Polish	1	130	3									
Portuguese		4										
Roumanian		20	4									
Russian		89	4							2		
Ruthenian		17						1				
Scandivanian—												
Danish		175							63			
Icelandic		11				2						
Norwegian		1,019		119	2							
Swedish		542		1	115							
Serbian		7										
Slovak		18										
Spanish		12										
Swiss	4	95	11					1				
Syrian		20										
Turkish		1										
Totals	893	18,370	279	121	118	2	25	26	63	36	4	9

Immigrants 10 Years and Over, by Racial Origin, for the Fiscal Year 1927-28

Russian	Yiddish	Hebrew	Ruthenian Russniak Ukrainian	Polish	Roumanian	Croat (Serbian)	Czech (Bohemian)	Hungarian (Magyar)	Italian	Spanish	Greek	Albanian	Bulgarian	Armenian (Aramaic)	Syrian (Arabic)
											1	1			
															1
														3	
		1	1	8				20		1					
							3	1							
						1	1								
							2								
1															
3					1			1							
											41		1		
2	10	95	1	3	1			3							
									69						
						4	2								
				1											
								30							
									1						
										1					
3				66											
					10										
45				3		1									
4			23	8				3							
										1					
						4	1								
1							1								
										5					
										1					8
											1				
59	10	96	25	89	12	10	10	58	70	9	43	1	1	3	9

TABLE 26.—Immigration, via Ocean Ports, showing Conjugal Condition, by Age Groups and Sex, for the Fiscal Year 1927-28

Age Groups	Males				Females			
	Married	Single	Widowed	Divorced	Married	Single	Widowed	Divorced
Years 0- 9		7,642				7,262		
" 10-17	6	7,199			32	4,014		
" 18-29	11,704	33,726	96	24	6,076	12,506	90	32
" 30-49	16,866	4,952	305	79	6,915	2,523	730	93
50 years and over	1,311	173	260	12	858	156	939	9

TABLE 27.—Immigration, from the United States, showing Conjugal Condition, by Age Groups and Sex, for the Fiscal Year 1927-28

Age Groups	Males				Females			
	Married	Single	Widowed	Divorced	Married	Single	Widowed	Divorced
Years 0- 9		2,334				2,222		
" 10-17	2	889			26	787		
" 18-29	1,421	3,748	18	20	1,856	735	20	20
" 30-49	3,780	1,682	195	113	2,166	254	164	41
50 years and over	1,091	260	325	43	475	37	278	5

TABLE 28.—Rejections, at Ocean Ports, showing Nationality and Sex, for the Fiscal Year 1927-28

—	18 years and over		Under 18 years	
	M.	F.	M.	F.
Austrian	2			
British	100	29	17	4
Czecho-Slovak	5			
Dutch	4	1		
Esthonian	1			
Finnish	10	7		
French	3	3		
German	8	2		
Greek	3	1		
Italian	17			
Japanese	5	1		
Jugo-Slav	6	1	2	1
Latvian	2			
Lithuanian	3	2		
Polish	12	5	1	2
Portuguese	2			
Roumanian	5	1		2
Russian	8	1		
Scandinavian—				
Danish	6	6		
Icelandic		1		
Norwegian	3	3		
Swedish	10	1	2	
Spanish	2			
Swiss	2			
Syrian	1			
U.S.A. citizens	2			
Uruguayan	1			
Total	223	65	22	9

TABLE 29.—Statement of Non-Immigrants, via Ocean Ports, showing Sex and Class of Travel, for the Fiscal Year 1927-28

—	Saloon				Cabin Class				Third Class			
	18 years and over		Under 18 years		18 years and over		Under 18 years		18 years and over		Under 18 years	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Canadian Born Returning	867	986	72	89	2,157	2,562	582	586	911	1,157	1,876	1,968
British Born Returning	205	177	4	5	1,749	1,976	68	98	5,106	6,608	401	521
British Naturalized Returning	84	137	.....	3	467	390	14	15	1,036	510	27	46
Alien National Returning	41	28	.....	2	203	136	21	24	1,180	332	18	14
Non-immigrant Tourist	613	532	68	84	2,247	2,125	175	173	1,320	2,137	106	113
" Professional	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" Student	6	1	4	5	14	4	10	1	16	.....	3	2
" Theatrical	.....	.....	.....	.....	19	19	1	.....	10	13	.....	3
" In transit	946	622	56	57	643	531	50	77	241	41	11	1
Totals	2,763	2,483	204	245	7,499	7,743	921	974	9,820	10,798	2,442	2,668

TABLE 30.—Origin, Sex, Occupation and Destination of Immigrant Arrivals,

—	Sex					Trade or								
	18 years and over		Under 18 years			Farming Class			Labouring Class			Mechanics		
	Males	Females	Males	Females	Totals	Males	Females	Children	Males	Females	Children	Males	Females	Children
Albanian	17	8	4	1	30	14	.....	2	2	....	.....	.....	.....	....
Arabian	1	2	3	.....	6	1	1	3	.....	....	.....	.....	.....	....
Armenian	8	14	13	9	44	5	1	.....	.....	....	.....	.....	2	1
Austrian	460	104	24	18	606	453	18	15	2	2	.....	3	1	....
Belgian	1,055	564	297	255	2,171	972	210	218	17	5	9	34	15	9
Bohemian	5	2	.....	.....	7	4	.....	.....	.....	....	.....	.....	.....	....
British—														
English	10,769	7,884	4,668	2,670	25,991	6,237	1,422	4,271	1,315	325	517	1,457	522	386
Irish	4,310	2,566	1,085	795	8,756	3,068	415	1,148	459	56	98	326	61	48
Scotch	5,331	5,117	2,301	1,592	14,341	2,832	574	1,896	678	156	290	853	210	148
Welsh	805	461	326	192	1,784	511	131	366	78	6	19	72	8	9
Bulgarian	209	27	7	6	249	128	2	4	75	....	2	4	1	....
Croatian	788	63	30	21	902	787	14	22	1	....	.....	.....	.....	....
Czech	495	123	56	40	714	490	19	26	3	1	6	.....	.....	....
Dutch	1,042	371	305	210	1,928	973	177	369	16	4	7	27	8	9
East Indian	2	25	25	4	56	.....	.....	4	2	7	6	.....	.....	....
Esthonian	60	39	6	5	110	59	5	5	.....	....	.....	1	.....	....
Finnish	2,723	1,680	235	127	4,765	2,125	132	130	510	29	37	59	17	3
French	491	251	67	59	868	294	46	33	39	13	7	72	31	8
German	6,971	2,748	1,296	1,017	12,032	6,330	1,001	1,647	80	7	40	331	31	18
Greek	417	120	35	11	583	329	5	15	63	3	.....	14	2	....
Hebrew	1,392	1,707	676	521	4,296	251	55	154	188	36	159	623	381	194
Herzegovinian	4	.....	.....	.....	4	4	.....	.....	.....	....	.....	.....	.....	....
Italian	2,101	715	534	243	3,593	1,628	34	230	267	20	86	161	12	29
Japanese	134	258	55	31	478	73	34	9	53	118	12	.....	10	3
Jugo-Slav	1,259	124	30	37	1,450	1,248	26	24	7	....	2	.....	.....	....
Lettish	37	28	6	6	77	35	3	5	.....	1	2	.....	.....	....
Lithuanian	698	271	36	32	1,037	685	19	14	4	....	2	1	1	....
Magyar	3,673	850	425	370	5,318	3,657	153	205	1	1	9	4	1	....
Maltese	16	11	4	8	39	6	.....	.....	6	....	.....	4	.....	....
Moravian	14	8	9	2	33	14	3	6	.....	....	.....	.....	.....	....
Negro	4	74	6	4	88	1	.....	1	1	....	3	1	2	....
Persian	1	3	.....	.....	4	.....	1	.....	.....	....	.....	.....	.....	....
Polish	4,585	1,349	466	333	6,733	4,511	287	434	17	1	8	33	18	10
Portuguese	4	3	.....	.....	7	4	1	.....	.....	....	.....	.....	.....	....
Roumanian	142	56	22	17	237	136	17	21	4	1	4	2	3	1
Russian	493	235	112	108	948	460	61	112	7	1	11	16	7	8
Ruthenian	7,030	2,090	592	416	10,128	7,014	287	481	8	....	17	2	.....	1
Scandinavian—														
Danish	2,717	626	279	213	3,835	2,506	169	274	51	3	9	106	22	17
Icelandic	16	7	3	2	28	12	.....	2	2	1	3	.....	.....	....
Norwegian	2,951	719	397	260	4,327	2,635	186	421	208	9	20	67	16	6
Swedish	2,340	482	216	96	3,134	2,079	72	176	167	8	10	64	7	10
Serbian	337	45	20	9	411	335	14	14	2	....	.....	.....	.....	....
Slovak	3,135	354	128	97	3,714	3,134	55	59	.....	....	6	.....	1	....
Spanish	13	10	3	2	28	8	2	2	3	....	.....	.....	1	....
Swiss	414	135	34	31	614	329	31	37	27	....	1	28	6	2
Syrian	39	25	10	8	82	32	3	5	1	1	.....	1	.....	....
Turkish	.....	2	1	1	4	.....	.....	.....	.....	....	.....	.....	.....	....
	69,508	32,356	14,847	9,879	126,590	56,409	5,686	12,860	4,364	815	1,402	4,366	1,397	920

for Canada, at Ocean Ports, for the Fiscal Year ended March 31, 1928

Occupation										Destination										
Trading Class			Mining Class				Other Classes													
Males	Females	Children	Males	Females	Children	Female Domestic Servants	Males	Females	Children	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories	Not given
1	....	1	....	....	....	5	....	3	2	....	....	....	6	6	12	5	1	....	....	....
....	....	....	....	....	....	1	....	....	....	....	....	....	6	....	....	....	....	....	....	....
2	1	3	....	....	....	4	1	6	18	....	1	....	1	41	....	....	....	1	....	....
....	....	....	....	....	....	50	2	33	27	1	....	....	53	58	435	32	10	17	....	....
6	4	3	6	....	....	58	20	272	313	23	5	....	215	1,205	531	93	74	25	....	....
....	....	....	....	....	....	2	1	....	....	....	....	....	....	....	4	2	....	1	....	....
765	423	234	265	60	83	2,859	730	2,273	1,847	1,040	427	84	3,559	9,889	3,569	2,279	2,595	2,537	12	....
313	108	46	10	1	1	1,443	134	482	539	77	109	38	1,529	3,954	1,002	548	1,079	420	....	....
510	259	138	160	27	42	2,664	298	1,227	1,379	404	249	32	1,980	6,679	1,367	1,102	1,365	1,161	2	....
55	17	13	60	6	9	153	29	140	102	22	29	4	198	618	283	186	309	134	1	....
....	....	....	....	....	....	9	2	15	7	1	....	....	1	235	2	6	3	1	....	....
....	....	....	....	....	....	17	....	32	29	1	....	....	3	74	781	15	19	9	....	....
....	....	....	1	....	....	54	1	49	64	7	....	....	34	110	458	52	44	9	....	....
16	4	1	....	....	....	85	10	93	129	5	49	....	117	676	566	270	172	67	....	....
....	....	....	....	....	....	....	....	18	19	....	....	....	....	2	....	....	....	54	....	....
....	....	....	....	....	....	26	....	8	6	....	....	....	1	16	68	5	17	2	1	....
9	10	1	4	....	....	1,279	16	213	191	20	10	....	1,137	3,026	154	29	65	324	....	....
47	12	4	6	2	4	47	33	100	70	33	2	1	479	125	61	73	60	33	1	....
162	23	11	....	....	....	1,142	68	544	597	27	11	1	728	1,001	7,216	1,839	1,074	135	....	....
8	2	....	....	....	....	65	3	43	31	7	2	....	61	417	14	31	5	46	....	....
225	78	91	....	....	....	691	105	466	599	24	15	....	1,555	1,790	482	224	108	98	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	....	....	....	....
7	2	6	19	3	....	210	19	434	426	51	5	....	624	1,911	359	142	145	351	5	....
4	17	3	....	1	....	6	4	72	59	....	....	....	....	1	....	1	9	467	....	....
....	....	....	....	....	....	42	4	56	41	....	....	....	14	143	1,148	45	49	51	....	....
....	....	....	....	....	....	18	2	6	5	....	....	....	4	17	46	2	5	3	....	....
....	....	....	2	....	....	201	6	50	52	5	....	....	133	100	672	85	35	7	....	....
2	2	....	....	....	....	212	9	481	581	22	....	....	152	662	3,010	1,076	384	11	....	1
....	....	....	....	....	....	3	....	8	12	....	....	....	1	35	2	....	....	1	....	....
....	....	....	....	....	....	3	....	2	5	....	....	....	....	13	20	....	....	....	....	....
....	....	....	....	....	....	67	1	5	6	14	3	....	37	32	1	1	....	....	....	....
....	....	....	....	....	....	2	1	....	....	....	....	....	3	1	....	....	....	....	....	....
13	3	7	....	1	....	745	11	294	340	26	7	....	217	696	4,856	578	320	33	....	....
....	....	....	....	....	....	2	....	....	....	....	....	....	....	3	2	....	1	1	....	....
....	....	....	....	....	....	20	....	15	13	....	....	....	18	38	132	27	21	1	....	....
3	3	1	....	....	....	95	7	68	88	5	....	....	113	111	450	133	87	49	....	....
2	....	....	....	....	....	1,404	4	399	509	9	....	1	167	640	6,859	1,355	1,065	32	....	....
28	6	1	1	1	....	266	25	159	191	45	296	7	521	368	1,618	344	503	133	....	....
1	....	....	....	....	....	5	1	1	....	1	....	....	....	1	24	1	....	1	....	....
14	4	7	6	....	....	327	21	177	203	11	19	4	279	267	1,647	751	725	624	....	....
12	3	....	1	....	....	289	17	103	116	5	41	....	366	574	1,038	267	328	514	1	....
....	....	....	....	....	....	14	....	17	15	....	....	....	2	53	309	29	14	4	....	....
....	1	....	....	....	....	144	1	153	160	6	....	....	93	290	2,987	145	157	36	....	....
1	....	....	....	....	....	1	1	6	3	....	....	....	12	7	2	....	3	4	....	....
18	4	....	....	....	....	56	12	38	25	3	....	1	186	89	220	46	42	27	....	....
1	2	2	....	....	....	11	4	8	11	2	2	....	27	16	21	11	2	1	....	....
....	....	....	....	....	....	1	....	1	2	....	....	....	3	....	....	....	....	1	....	....
2,225	988	573	541	102	139	14,798	1,603	8,570	8,832	1,897	1,282	173	14,635	35,990	42,432	11,836	10,895	7,426	23	1

TABLE 31.—Origin, Sex, Occupation and Destination of Immigrant Arrivals,

—	Sex					Trade or								
	18 years and over		Under 18 years			Farming Class			Labouring Class			Mechanics		
	Males	Females	Males	Females	Totals	Males	Females	Children	Males	Females	Children	Males	Females	Children
Albanian	3	.....	.....	.....	3	1	.....	.....	.....	....	.....	.....	.....	....
Arabian	1	.....	.....	.....	1	.....	.....	.....	1	....	.....	.....	.....	....
Armenian	7	2	.....	.....	9	1	1	.....	2	....	.....	3	.....	....
Austrian	81	33	17	22	153	48	18	25	14	4	7	8	1	1
Belgian	45	16	6	11	78	28	6	12	3	1	.....	8	2	1
Bohemian	45	17	1	4	67	34	6	4	4	3	.....	4	.....	....
British—														
English	3,736	1,948	833	774	7,291	1,345	352	403	465	92	86	761	218	131
Irish	1,581	732	320	333	2,966	626	130	142	272	35	42	312	55	42
Scotch	1,540	667	347	302	2,856	552	118	169	197	31	35	354	70	47
Welsh	169	64	37	19	289	57	13	12	23	2	2	39	7	5
Bulgarian	2	.....	.....	.....	2	2	.....	.....	.....	....	.....	.....	.....	....
Croatian	5	.....	.....	.....	5	2	.....	.....	1	....	.....	1	.....	....
Czech	8	2	2	1	13	4	.....	3	.....	....	.....	1	.....	....
Dutch	278	141	65	53	537	139	38	47	30	8	2	40	4	6
Esthonian	2	.....	.....	.....	2	1	.....	.....	.....	....	.....	.....	.....	....
Finnish	69	27	7	9	112	24	11	8	8	2	.....	10	.....	3
French	999	718	708	713	3,138	334	92	181	210	31	49	248	76	79
German	1,680	760	385	365	3,190	863	209	363	185	19	30	245	50	35
Greek	48	10	8	6	72	4	3	9	21	....	.....	5	1	....
Hebrew	265	127	49	29	470	7	.....	1	28	2	3	36	8	3
Italian	116	33	26	15	190	11	1	2	25	6	2	32	4	6
Jugo-Slav	11	3	2	3	19	4	.....	1	3	1	2	1	.....	....
Lettish	5	1	1	1	8	2	.....	1	1	....	.....	2	.....	1
Lithuanian	9	3	2	1	15	3	1	.....	1	....	.....	2	1	....
Magyar	40	34	22	7	103	22	9	15	6	....	.....	6	2	....
Maltese	1	.....	.....	.....	1	.....	.....	.....	1	....	.....	.....	.....	....
Mexican	1	.....	.....	.....	1	1	.....	.....	.....	....	.....	.....	.....	....
Moravian	1	1	.....	.....	2	.....	.....	.....	.....	....	.....	.....	.....	....
Negro	164	60	3	10	237	3	.....	.....	127	5	2	8	1	....
North American Indian	8	5	8	7	28	3	2	.....	5	....	.....	.....	1	....
Polish	117	65	45	27	254	64	19	29	14	3	.....	15	10	4
Portuguese	4	.....	.....	.....	4	1	.....	.....	1	....	.....	1	.....	....
Roumanian	22	7	4	5	38	14	4	6	1	....	.....	1	.....	....
Russian	84	54	23	23	184	48	25	15	2	....	.....	16	8	15
Ruthenian	38	16	3	4	61	35	11	2	.....	....	.....	1	.....	....
Scandinavian—														
Danish	171	51	32	30	284	118	20	46	14	....	1	13	2	3
Icelandic	9	4	4	1	18	6	1	1	.....	....	.....	3	1	....
Norwegian	756	290	159	125	1,330	583	114	172	60	6	6	48	10	9
Swedish	463	155	74	65	757	283	63	82	40	6	7	63	8	9
Serbian	5	4	4	2	15	2	.....	.....	.....	....	.....	1	1	4
Slovak	12	4	4	.....	20	7	2	1	2	....	.....	1	1	....
Spanish	11	6	.....	.....	17	1	1	.....	3	....	.....	2	1	....
Swiss	72	29	21	12	134	32	5	15	13	2	3	13	1	3
Syrian	11	12	3	5	31	3	1	.....	.....	....	.....	1	2	2
Turkish	1	1	.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	....
	12,696	6,102	3,225	2,984	25,007	5,318	1,276	1,767	1,784	260	279	2,305	546	409

for Canada, from the United States, for the Fiscal Year ended March 31, 1928

Occupation										Destination										
Trading Class			Mining Class				Other Classes													
Males	Females	Children	Males	Females	Children	Female Domestic Servants	Males	Females	Children	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories	Not given
2													2				1			
														1						
							1	1					2	5			1	1		
3			4			2	4	8	6				6	27	25	43	44	8		
2	1		2				2	6	4	2			4	45	8	3	5	11		
1						2	2	6	1				3	18	8	20	15	2	1	
550	220	100	46	9	3	118	569	939	884	44	101	7	747	3,451	254	590	1,140	953	4	
191	77	27	14	1	2	73	166	361	398	22	33	4	314	1,259	130	322	562	317	3	
209	66	41	21	3	2	52	207	327	355	15	23	23	224	1,183	139	272	559	406	1	1
20	5	6	6	1	2	2	24	34	29		1		17	115	16	29	65	46		
																1	1			
1														3	1			1		
	1						3	1						5	4	2	2			
28	13	12	2			14	39	64	51		1	1	25	212	26	97	122	52	1	
							1						1				1			
5	1		16			5	6	8	5	1			9	62	3	15	15	7		
103	46	36	3			84	101	389	1,076	17	56	6	1,970	560	81	183	197	68		
56	66	26	16		1	65	215	351	295	3	3		127	982	196	831	830	215	3	
10	1	1	2				6	5	4				11	33	5	4	2	17		
140	42	23	1			3	53	72	48	2			138	259	28	6	13	24		
21	2	4	2			2	25	18	27	1			58	102	3		10	13		3
1	1						2	1	2					5	1	2	5	6		
	1												1	3	3		1			
2							1	1	3				3	6	5			1		
3	1					5	3	17	14				7	27	4	53	11	1		
														1						
														1						
	1						1							2						
4	3	1				27	22	24	10	1			33	181	14	1	3	4		
						1		1	15				8	11			3	6		
12	5	1	1			3	11	25	38				12	75	49	26	78	14		
							1				1		1					2		
2	1	1				1	4	1	2				3	13	1	16	5			
12	2	2	1			4	5	15	14				25	30	9	53	50	17		
1							1	5	5				1	6	16	30	8			
13	1	1				8	13	20	11		1		10	48	10	53	140	22		
								2	4						6	7	2	3		
19	15	6	6	2	1	30	40	113	90	2		1	21	126	44	576	426	132	2	
28	8	3	12	1		12	37	57	38	1	1		18	132	67	222	220	95	1	
							2	3	2		1		6	6		2				
			1				1	1	3				3	2		5	6	4		
2	2						3	2					6	6	2	2	1			
4	4		1			3	9	14	12	1	1		8	44	6	28	30	16		
6	2						1	7	6	1	1		10	13		1	4	1		
														2						
1,551	588	291	157	17	11	516	1,581	2,899	3,452	123	224	42	3,834	9,062	1,164	3,495	4,578	2,465	16	4

TABLE 32.—Monthly Arrivals of Immigrants, by Occupation and Destination, at the Port of St. John, for the Fiscal Year 1927-28

Occupation and destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	5,827	2	1	2	.....	.....	.....	72	302	352	508	2,682	9,748
Labouring class	144	1	1	2	2	.....	.....	10	75	73	55	104	467
Mechanics	194	1	1	.....	.....	.....	.....	15	59	80	57	162	569
Trading and clerical classes	114	1	2	.....	1	1	.....	9	52	58	73	88	399
Mining class	43	.....	.....	.....	.....	.....	.....	8	34	16	5	31	137
Female domestic servants	391	7	6	5	8	2	5	43	159	132	177	337	1,272
Other classes	359	2	6	5	5	1	.....	58	355	254	218	321	1,584
Totals	7,072	14	17	14	16	4	5	215	1,036	965	1,093	3,725	14,176
Nova Scotia	61	2	3	2	5	1	1	6	3	4	1	17	106
New Brunswick	73	3	1	1	.....	1	.....	7	45	16	19	20	186
Prince Edward Island	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2
Quebec	391	3	7	6	6	.....	2	21	112	170	142	280	1,140
Ontario	1,253	4	5	5	5	2	2	74	452	349	342	824	3,317
Manitoba	3,658	.....	.....	.....	.....	.....	.....	18	98	96	218	1,662	5,750
Saskatchewan	670	.....	.....	.....	.....	.....	.....	22	130	139	125	390	1,476
Alberta	647	2	.....	.....	.....	.....	.....	38	117	133	129	364	1,430
British Columbia	318	.....	1	.....	.....	.....	.....	29	79	57	117	168	769
Totals	7,072	14	17	14	16	4	5	215	1,036	965	1,093	3,725	14,176

TABLE 33.—Monthly Arrivals of Immigrants, by Occupation and Destination, at the Port of Halifax, for the Fiscal Year 1927-28

Occupation and destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	13,073	4,120	1,965	1,099	783	423	425	305	426	344	676	6,366	30,005
Labouring class	243	112	115	92	77	52	62	79	130	101	100	184	1,347
Mechanics	315	176	142	81	122	59	62	84	167	147	149	259	1,763
Trading and clerical classes	123	36	38	33	15	23	19	39	70	70	57	116	639
Mining class	19	4	8	7	4	3	2	2	18	6	8	2	83
Female domestic servants	929	408	317	280	289	261	241	199	346	274	247	640	4,431
Other classes	635	326	301	321	330	351	375	313	582	390	294	586	4,804
Totals	15,337	5,182	2,886	1,913	1,620	1,172	1,186	1,021	1,739	1,332	1,531	8,153	43,072
Nova Scotia	182	170	62	76	54	42	37	21	53	32	38	53	820
New Brunswick	118	97	48	49	4	26	6	5	22	8	16	66	465
Prince Edward Island	30	20	6	3	1	4	2	1	3	2	.....	2	74
Quebec	870	443	306	206	247	189	192	245	376	277	247	598	4,196
Ontario	2,261	995	783	561	444	390	402	342	671	501	576	1,228	9,154
Manitoba	9,121	2,599	1,089	520	486	172	248	154	199	191	283	4,521	19,583
Saskatchewan	1,285	335	293	222	159	142	122	110	185	153	152	843	4,001
Alberta	1,025	299	166	147	133	110	109	86	159	107	146	596	3,083
British Columbia	445	224	133	129	92	97	68	57	71	61	73	241	1,691
Northwest Territories	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5
Totals	15,337	5,182	2,886	1,913	1,620	1,172	1,186	1,021	1,739	1,332	1,531	8,153	43,072

TABLE 34.—Monthly Arrivals of Immigrants, by Occupation and Destination, at the Port of Quebec, for the Fiscal Year 1927-28

Occupation and destination	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Farming class	6,885	10,479	7,460	3,550	2,322	1,689	1,360	567	3	.....	.....	1	34,316
Labouring class	543	759	624	534	373	367	435	205	1	.....	1	1	3,843
Mechanics	531	775	588	548	343	393	397	258	1	.....	.....	1	3,835
Trading and clerical classes	250	426	303	334	270	326	307	155	.....	.....	.....	1	2,372
Mining class	47	88	60	64	43	69	69	37	.....	.....	.....	.....	477
Female domestic servants	784	1,512	1,500	1,284	801	888	1,261	611	1	.....	2	1	8,645
Other classes	848	1,641	1,433	1,451	1,453	1,539	1,674	851	11	.....	3	.....	10,904
Totals	9,888	15,680	11,968	7,765	5,605	5,271	5,503	2,684	17	.....	6	5	64,392
Nova Scotia	39	111	152	43	45	23	31	33	.....	.....	.....	.....	477
New Brunswick	40	172	233	58	18	30	22	16	.....	.....	.....	.....	589
Prince Edward Island	.....	24	39	21	.....	1	6	5	.....	.....	.....	.....	96
Quebec	937	1,610	1,320	1,126	862	982	1,072	576	4	.....	1	1	8,491
Ontario	2,811	4,572	3,538	3,033	2,124	2,225	2,547	1,208	5	.....	4	1	22,068
Manitoba	4,013	5,646	3,308	1,403	1,043	695	515	211	4	.....	.....	1	16,839
Saskatchewan	873	1,484	1,319	822	580	482	438	201	4	.....	.....	.....	6,203
Alberta	800	1,367	1,515	774	540	472	485	214	.....	.....	.....	1	6,168
British Columbia	375	687	537	485	391	359	387	220	.....	.....	1	1	3,443
Northwest Territories	.....	6	7	.....	2	2	.....	.....	.....	.....	.....	.....	17
Not given	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals	9,888	15,680	11,968	7,765	5,605	5,271	5,503	2,684	17	.....	6	5	64,392

TABLE 35.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of St. John, for the Fiscal Year 1927-28

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	4
Arabian	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Armenian	2	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	4
Austrian	60	.....	.....	.....	.....	.....	.....	.....	9	3	14	72	158
Belgian	148	.....	.....	.....	.....	.....	.....	.....	27	12	21	76	284
Bohemian	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
British—													
English	1,546	3	6	5	6	2	.....	68	180	240	268	830	3,154
Irish	452	1	1	.....	.....	.....	.....	8	42	49	79	263	895
Scotch	781	.....	.....	.....	.....	.....	.....	1	143	112	128	370	1,535
Welsh	134	.....	.....	.....	.....	.....	.....	1	17	14	17	42	225
Bulgarian	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	1	.....	6
Czech	9	.....	.....	.....	.....	.....	.....	.....	18	6	18	35	86
Dutch	44	.....	.....	.....	.....	.....	.....	4	13	10	16	43	130
Esthonian	1	.....	.....	.....	.....	.....	.....	1	3	2	2	10	19
Finnish	95	.....	.....	.....	.....	.....	.....	10	52	49	29	61	296
French	16	.....	.....	.....	.....	.....	.....	.....	14	2	11	14	57
German	488	2	1	.....	1	.....	.....	29	113	116	198	342	1,290
Greek	4	.....	.....	.....	.....	.....	.....	.....	26	8	10	23	71
Hebrew	42	.....	.....	.....	.....	.....	.....	12	45	56	36	28	219
Italian	1	.....	.....	.....	.....	.....	.....	.....	73	36	.....	10	120
Jugo-Slav	487	.....	.....	.....	.....	.....	.....	2	12	10	15	91	617
Lettish	11	.....	.....	.....	.....	.....	.....	1	1	3	.....	1	17
Lithuanian	98	.....	.....	.....	.....	.....	.....	3	3	12	12	89	217
Magyar	538	.....	.....	.....	.....	.....	.....	.....	66	37	58	272	971
Maltese	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	5	.....	6
Negro	4	7	9	8	7	2	5	12	1	.....	2	.....	57
Polish	473	.....	.....	.....	.....	.....	.....	20	37	33	23	178	764
Portuguese	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	3
Roumanian	42	.....	.....	.....	.....	.....	.....	1	2	2	1	19	67
Russian	84	.....	.....	.....	.....	.....	.....	4	13	6	2	23	132

TABLE 35.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of St. John, for the Fiscal Year 1927-28—*Concluded*

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April
Ruthenian	459	.....	.....	.....	.....	.....	.....	25	81	80	57	250	952
Scandinavian—													
Danish	148	.....	.....	.....	.....	.....	.....	7	17	11	16	235	434
Icelandic	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Norwegian	315	1	.....	.....	.....	.....	.....	1	8	7	15	55	402
Swedish	35	.....	.....	.....	.....	.....	.....	5	7	10	15	39	111
Serbian	34	.....	.....	.....	.....	.....	.....	.....	1	.....	1	7	43
Slovak	487	.....	.....	.....	.....	.....	.....	.....	8	28	15	214	752
Spanish	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	3
Swiss	31	.....	.....	.....	.....	.....	.....	.....	1	4	4	29	69
Syrian	1	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	3
Totals	7,072	14	17	14	16	4	5	215	1,036	965	1,093	3,725	14,176

TABLE 36.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of Quebec, for the Fiscal Year 1927-28

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	1	1	2	.....	11	.....	.....	.....	.....	.....	.....	.....	15
Armenian	.....	1	1	8	3	2	.....	.....	.....	.....	.....	.....	15
Austrian	88	107	116	8	8	15	30	7	.....	.....	.....	.....	379
Belgian	210	364	133	122	48	66	81	29	.....	.....	.....	.....	1,053
Bohemian	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2
British—													
English	2,930	3,579	2,744	2,255	1,834	1,585	1,609	720	11	.....	2	1	17,270
Irish	795	1,557	1,336	966	578	532	527	204	1	.....	1	.....	6,497
Scotch	1,046	2,396	2,655	1,364	997	836	1,041	589	.....	.....	.....	2	10,926
Welsh	213	255	174	156	119	109	127	52	.....	.....	.....	.....	1,205
Bulgarian	5	6	7	12	3	5	8	4	.....	.....	.....	.....	50
Croatian	14	121	4	.....	3	2	16	5	.....	.....	.....	.....	165
Czech	119	52	4	24	30	14	8	6	.....	.....	.....	.....	257
Dutch	182	165	105	106	181	51	61	43	.....	.....	.....	1	895
East Indian	.....	.....	.....	.....	7	2	.....	.....	.....	.....	.....	.....	9
Esthonian	8	18	15	1	7	4	3	8	.....	.....	.....	.....	64
Finnish	111	414	330	224	151	166	185	89	.....	.....	.....	.....	1,670
French	54	101	74	56	53	73	74	43	.....	.....	.....	.....	528
German	518	950	709	565	388	284	439	169	.....	.....	1	1	4,024
Greek	7	22	24	44	17	49	44	33	.....	.....	.....	.....	240
Hebrew	43	148	197	252	169	191	215	142	.....	.....	1	.....	1,358
Italian	141	36	210	219	40	392	139	97	.....	.....	.....	.....	1,274
Jugo-Slav	213	249	42	13	8	31	15	9	.....	.....	.....	.....	580
Lettish	4	9	6	9	2	.....	5	1	.....	.....	.....	.....	36
Lithuanian	63	86	46	29	23	14	26	5	.....	.....	.....	.....	292
Magyar	607	1,306	325	135	124	111	123	43	.....	.....	.....	.....	2,774
Maltese	.....	2	13	4	.....	1	1	.....	.....	.....	.....	.....	21
Moravian	.....	8	2	8	.....	.....	.....	.....	.....	.....	.....	.....	18
Negro	.....	.....	5	1	.....	.....	.....	.....	.....	.....	.....	.....	6
Persian	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Polish	446	957	719	251	165	121	161	62	.....	.....	1	.....	2,883
Portuguese	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Roumanian	2	19	11	14	8	18	8	5	.....	.....	.....	.....	85
Russian	55	208	110	57	34	27	28	11	.....	.....	.....	.....	530
Ruthenian	671	1,216	1,066	413	263	272	300	143	2	.....	.....	.....	4,346
Scandinavian—													
Danish	187	309	115	119	109	76	53	37	.....	.....	.....	.....	1,005
Icelandic	1	.....	8	2	2	4	.....	1	.....	.....	.....	.....	18
Norwegian	238	330	180	136	79	83	38	27	.....	.....	.....	.....	1,111
Swedish	37	93	59	79	78	39	43	37	.....	.....	.....	.....	465
Serbian	19	49	6	7	8	5	7	5	.....	.....	.....	.....	106
Slovak	805	445	372	47	26	57	51	47	3	.....	.....	.....	1,853
Spanish	1	1	.....	1	.....	2	2	.....	.....	.....	.....	.....	7
Swiss	51	86	38	52	29	25	30	10	.....	.....	.....	.....	321
Syrian	.....	10	3	6	.....	6	5	.....	.....	.....	.....	.....	30
Turkish	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	4
Totals	9,888	15,680	11,968	7,765	5,605	5,271	5,503	2,684	17	.....	6	5	64,392

TABLE 37.—Monthly Arrivals of Immigrants, by Racial Origin, at the Port of Halifax, for the Fiscal Year 1927-28

Racial Origin	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Albanian	7	1	.....	.....	1	.....	.....	.....	.....	.....	.....	2	11
Arabian	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	5
Armenian	1	.....	.....	2	.....	.....	.....	.....	1	.....	.....	1	5
Austrian	44	.....	1	.....	3	1	.....	5	1	4	.....	9	68
Belgian	329	120	40	57	19	33	18	8	10	5	31	151	821
Bohemian	2	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	4
British—													
English	1,802	266	84	61	54	44	40	35	201	142	194	809	3,732
Irish	748	22	3	3	2	2	3	4	57	42	69	275	1,230
Scotch	764	16	4	13	9	3	2	1	201	84	159	264	1,520
Welsh	185	16	3	3	.....	.....	1	1	23	7	18	73	330
Bulgarian	9	4	43	5	5	3	2	16	30	4	17	26	164
Croatian	470	23	6	5	1	.....	8	4	7	5	6	196	731
Czech	204	30	6	2	4	.....	.....	.....	18	4	7	90	365
Dutch	317	147	102	59	32	23	.....	3	9	4	6	147	849
Esthonian	16	.....	2	.....	.....	1	.....	.....	.....	.....	.....	4	23
Finnish	402	425	308	262	224	233	205	117	126	77	127	192	2,698
French	47	30	18	24	.....	5	2	8	32	11	14	49	240
German	1,556	991	556	220	330	167	208	94	152	133	117	1,940	6,464
Greek	42	13	14	2	5	3	3	16	34	25	43	33	233
Hebrew	282	140	242	124	209	130	173	182	245	283	168	282	2,460
Herzegovinian	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Italian	89	319	273	255	190	3	80	66	40	16	59	4	1,394
Jugo-Slav	120	11	2	2	.....	4	.....	1	5	.....	.....	106	251
Lettish	4	.....	5	1	1	1	.....	.....	1	1	.....	7	21
Lithuanian	214	24	14	7	9	16	18	6	21	43	13	133	518
Magyar	823	65	61	32	10	23	27	81	72	58	47	267	1,566
Maltese	1	.....	.....	.....	5	.....	.....	1	.....	.....	1	3	11
Moravian	8	.....	3	1	.....	.....	.....	.....	.....	.....	.....	3	15
Polish	1,566	446	198	105	56	30	53	52	113	65	79	299	3,062
Portuguese	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Roumanian	17	10	2	1	6	3	2	15	2	4	2	6	70
Russian	31	5	31	.....	2	.....	1	20	8	11	12	46	167
Ruthenian	1,979	543	244	111	83	62	67	60	180	125	131	1,237	4,822
Scandinavian—													
Danish	536	507	134	159	77	80	65	62	38	34	109	545	2,346
Icelandic	1	.....	.....	.....	1	2	.....	.....	.....	.....	4	.....	8
Norwegian	1,101	491	151	207	108	166	99	67	29	34	24	281	2,758
Swedish	611	405	296	178	152	125	87	75	59	89	59	361	2,497
Serbian	188	9	7	3	4	2	1	1	5	4	4	33	261
Slovak	743	41	7	5	4	4	16	14	13	7	9	243	1,106
Spanish	.....	.....	.....	1	.....	1	3	.....	.....	.....	.....	1	6
Swiss	71	62	18	2	6	2	1	1	2	4	1	35	205
Syrian	2	.....	8	1	2	.....	1	5	4	6	1	.....	30
Totals	15,337	5,182	2,886	1,913	1,620	1,172	1,186	1,021	1,739	1,332	1,531	8,153	43,072

TABLE 38.—Statement of Immigration, showing Racial Origin by Occupation and Destination, at the Port of St. John, for the Fiscal Year 1927-28

Racial Origin	Totals	Occupation							Destination								
		Farming Class	Labouring Class	Mechanics	Trading and Clerical Classes	Mining Class	Female Domestic Servants	Other Classes	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Albanian	4	3			1							2		1		1	
Arabian	1						1					1					
Armenian	4			2				2					4				
Austrian	158	130	1				17	10				2	26	117	8	1	4
Belgian	284	200	2	4		1	6	71	3			21	118	94	28	14	6
Bohemian	1	1												1			
British—																	
English	3,154	1,824	176	226	171	70	251	436	18	65	1	432	1,004	525	395	418	296
Irish	895	520	46	33	63	1	142	90	8	8		118	403	134	63	93	68
Scotch	1,535	689	105	150	96	42	248	205	55	50	1	186	632	137	151	138	185
Welsh	225	146	9	11	8	20	12	19		9		22	60	27	24	65	18
Bulgarian	6	5						1							5	1	
Czech	86	57	1				4	24				4	25	21	16	18	2
Dutch	130	89	3	5	2		10	21		1		6	48	31	26	17	1
Esthonian	19	13					4	2					5	10		4	
Finnish	296	179	37	7	3		54	16		3		60	183	3	2	4	41
French	57	27	1	7	6		5	11	1			26	11	9	1	9	
German	1,290	902	13	36	17		152	170		5		58	135	623	255	185	29
Greek	71	46	7	3			3	12				2	63	1	2	1	2
Hebrew	219	30	14	54	21		40	60	1			67	100	6	23	17	5
Italian	120	67	19	12	1	1	9	11				17	76	3		8	16
Jugo-Slav	617	571	2				15	29				5	49	505	18	22	18
Lettish	17	12	1				1	3					4	11	1	1	
Lithuanian	217	191					15	11				3	6	182	16	9	1
Magyar	971	820		1			27	123				10	66	705	105	84	1
Maltese	6	1		1				4					6				
Negro	57		3	1			43	10	14	3		24	16				
Polish	764	648		1			53	62	5			1	78	578	58	38	6
Portuguese	3	1					2						2	1			
Roumanian	67	59					2	6					6	56	1	4	
Russian	132	101	4	1	1		11	14				2	14	82	12	17	5
Ruthenian	952	770	2	1			87	92	1			8	75	637	115	111	5

Scandinavian—																	
Danish	434	380	2	8	3	2	19	20	.....	35	.....	32	35	215	47	63	7
Icelandic	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Norwegian	402	367	6	3	1	.....	15	10	.....	2	.....	5	12	250	61	41	31
Swedish	111	94	9	1	2	.....	3	2	.....	5	.....	7	8	57	6	11	17
Serbian	43	41	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	40	2	1	.....
Slovak	752	707	1	.....	.....	.....	19	25	.....	.....	.....	5	35	650	34	25	3
Spanish	3	1	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	2	.....
Swiss	69	54	3	1	3	.....	2	6	.....	.....	.....	12	10	37	1	7	2
Syrian	3	1	.....	.....	.....	.....	.....	2	.....	.....	.....	1	2	.....	.....	.....	.....
Totals	14,176	9,748	467	569	399	137	1,272	1,584	106	186	2	1,140	3,317	5,750	1,476	1,430	769

TABLE 39.—Statement of Immigration, showing Racial Origin by Occupation and Destination, at the Port of Halifax, for the Fiscal Year 1927-28

Racial Origin	Totals	Occupation							Destination									
		Farming Class	Labouring Class	Mechanics	Trading and Clerical Classes	Mining Class	Female Domestic Servants	Other Classes	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories
Albanian	11	8	1				2					2						
Arabian	5	5										5	1	8				
Armenian	5	1		1			1	2					5					
Austrian	68	52	1	2			3	10				2		62	3	1		
Belgian	821	563	4	3		1	27	223	16			66	480	211	25	23		
Bohemian	4	2					2							3	1			
British—																		
English	3,732	2,374	180	272	154	44	328	380	413	75	45	353	1,034	852	382	350	224	4
Irish	1,230	813	67	52	46	2	158	92	39	35	2	148	503	228	133	95	47	
Scotch	1,520	742	111	101	98	15	227	226	117	17	12	184	599	202	132	186	70	1
Welsh	330	244	13	8	15	4	25	21	7	1	3	22	94	71	38	64	30	
Bulgarian	164	107	41	2			6	8	1				161	1	1			
Croatian	731	690					12	29	1			1	36	669	11	10	3	
Czech	365	297	4				25	39	2			17	54	284	3	5		
Dutch	849	717	5	8	7		21	91	5	43		55	282	322	38	86	18	
Esthonian	23	20					2	1						19	1	2	1	
Finnish	2,698	1,416	110	30	2	2	854	284	14	7		619	1,721	122	19	35	161	
French	240	137	18	15	15	7	8	40	24		1	89	58	23	16	20	9	
German	6,464	5,143	50	205	85		455	526	26			403	423	4,429	741	405	37	
Greek	233	140	33	4	3		22	31	4			37	165	5	18	1	3	
Hebrew	2,460	266	237	702	171		386	698	11	3		839	991	357	144	68	47	
Herzegovinian	4	4												4				
Italian	1,394	932	146	108	3	5	92	108	29	1		255	715	139	69	70	116	
Jugo-Slav	251	239					1	11				1	11	215	21	2	1	
Lettish	21	13	2				5	1				3		17			1	
Lithuanian	518	344	3	1			112	58	3			78	70	329	29	9		
Magyar	1,566	1,090	3	2	2		81	388	12			79	295	798	329	51	2	
Maltese	11	2	3				2	4					10	1				
Moravian	15	14					1							15				
Polish	3,062	2,488	10	17	3		263	281	16	5		82	232	2,364	251	111	1	
Portuguese	1	1												1				
Roniauman	70	56	2	1			8	3				5	14	31	10	10		

Russian	167	94	.....	17	1	.....	16	39	2	.....	.....	40	22	86	9	6	2	.....
Ruthenian	4,822	3,933	8	1	.....	.....	542	338	8	.....	1	60	188	3,622	542	394	7	.....
Scandinavian—																		
Danish	2,346	1,773	27	87	15	.....	182	262	44	228	7	232	201	1,015	212	333	74	.....
Icelandic	8	5	1	.....	.....	.....	2	.....	1	.....	.....	.....	1	6	.....	.....	.....	.....
Norwegian	2,758	2,004	144	65	11	2	237	295	11	17	3	145	170	1,019	530	446	417	.....
Swedish	2,497	1,871	116	55	5	1	261	188	5	31	.....	258	495	817	224	255	412	.....
Serbian	261	240	2	.....	.....	.....	4	15	.....	.....	.....	1	30	212	8	10	.....	.....
Slovak	1,106	990	.....	.....	.....	.....	29	87	6	.....	.....	41	67	935	27	28	2	.....
Spanish	6	1	1	.....	.....	.....	1	3	.....	.....	.....	5	1	.....	.....	.....	.....	.....
Swiss	205	159	3	4	3	.....	22	14	2	.....	.....	58	20	85	27	7	6	.....
Syrian	30	15	1	.....	.....	.....	6	8	1	2	.....	11	5	4	7	.....	.....	.....
Totals	43,072	30,005	1,347	1,763	639	83	4,431	4,804	820	465	74	4,196	9,154	19,583	4,001	3,083	1,691	5

TABLE 40.—Statement of Immigration, showing Racial Origin by Occupation and Destination at the Port of Quebec, for the Fiscal Year 1927-28

Racial Origin	T tals	Occupation							Destination										
		Farming Class	Labouring Class	Mechanics	Trading and Clerical Classes	Mining Class	Female Domestic Servants	Other Classes	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories	Not given
Albanian	15	5	1		1		3	5				2	5	3	5				
Armenian	15	4			6		1	4		1		1	13						
Austrian	379	303	2	2			30	42	1			49	32	256	21	8	12		
Belgian	1,053	632	23	51	13	4	24	306	4	5		125	600	226	39	36	18		
Bohemian	2	1						1							1		1		
British—																			
English	17,270	7,573	1,375	1,612	918	228	2,032	3,532	141	250	38	2,531	7,449	2,149	1,459	1,764	1,481	8	
Irish	6,497	3,269	480	328	332	9	1,136	943	27	66	36	1,248	3,021	632	350	880	237		
Scotch	10,926	3,836	851	881	653	161	2,173	2,371	226	182	19	1,540	5,345	1,018	800	1,032	763	1	
Welsh	1,205	613	78	66	53	50	116	229	14	19	1	151	462	185	123	180	69	1	
Bulgarian	50	20	16	1			2	11				1	46	1		2			
Croatian	165	131	1				5	28				2	34	110	4	9	6		
Czech	257	178	5			1	25	48	5			10	31	153	33	21	4		
Dutch	895	681	16	27	8		54	109		5		52	334	200	208	58	38		
East Indian	9		2					7					2				7		
Esthonian	64	36					19	9					9	39	4	10	1	1	
Finnish	1,670	745	426	40	14	1	334	110	3			442	1,049	27	8	26	115		
French	528	195	36	86	38	5	29	139	5	1		340	51	29	53	31	17	1	
German	4,024	2,790	58	108	77		521	470	1	6	1	220	378	2,084	805	466	63		
Greek	240	143	18	8	5		37	29	2	2		16	183	8	10		19		
Hebrew	1,358	138	109	368	176		224	343	12	8		545	607	81	50	22	33		
Italian	1,274	848	108	73	3	11	88	143	15	4		191	593	191	65	53	157	5	
Jugo-Slav	580	488	5				26	61				8	82	428	6	25	31		
Lettish	36	17					12	7				1	13	17	1	4			
Lithuanian	292	179	1	1		2	70	39	2			49	24	159	40	16	2		
Magyar	2,774	2,099	8	2	2		104	559	10			63	299	1,502	642	249	8		1
Maltese	21	3	2	3			1	12				1	19	1					
Moravian	18	9					2	7					13	5					
Negro	6	1					5					3	2	1					
Persian	4	1					2	1				3	1						
Polish	2,883	2,091	14	42	19	1	425	291	5	2		131	378	1,912	264	167	24		

Portuguese	1	1														1			
Roumanian	85	50	6	5			7	17				12	15	41	16	1			
Russian	530	364	12	12	3		67	72	3			38	74	281	101	23	10		
Ruthenian	4,346	3,073	14	1	2		774	482				99	376	2,599	697	555	20		
Scandinavian—																			
Danish	1,005	768	33	44	13		62	85	1	33		254	122	382	79	102	32		
Icelandic	18	8	5		1		2	2						16	1		1		
Norwegian	1,111	858	66	20	10	4	75	78				103	82	378	158	237	153		
Swedish	465	331	47	25	7		18	37		5		85	59	153	35	58	70		
Serbian	106	81					10	15				1	22	57	19	3	4		
Slovak	1,853	1,550	5	1	1		95	201				47	186	1,402	84	103	31		
Spanish	7	3	1					3				4	1	2					
Swiss	321	179	18	27	16		32	49			1	114	52	97	18	24	15		
Syrian	30	21	1	1	1		2	4				6	4	14	4	2			
Turkish	4						1	3				3					1		
Totals	64,392	34,316	3,843	3,835	2,372	477	8,645	10,904	477	589	96	8,491	22,068	16,839	6,203	6,168	3,443	17	1

TABLE 41.—Admissions and Rejections, by Divisions, for the Fiscal Year 1927-28

—	Ocean Ports		International Boundary Ports		Ocean Ports, and International Boundary Ports	
	Admissions	Rejections	Admissions	Rejections	Admissions	Rejections
Eastern Division:—						
Quebec	64,392	115	.....	.....	.....	.....
Halifax	43,072	93	.....	.....	.....	.....
St. John	14,176	29	.....	.....	.....	.....
North Sydney	832	14	.....	.....	.....	.....
Montreal	272	37	.....	.....	.....	.....
Sydney	7	.....	.....	.....	.....	.....
New York	1,641	8	.....	.....	.....	.....
Boston	218	.....	.....	.....	.....	.....
International Boundary Ports	.....	.....	14,011	14,621	.....	.....
Totals	124,610	296	14,011	14,621	138,621	14,917
Western Division—						
International Boundary Ports	.....	.....	8,422	654	8,422	654
Pacific Division—						
Vancouver	1,386	14	.....	.....	.....	.....
Victoria	475	9	.....	.....	.....	.....
International Boundary Ports	.....	.....	2,574	663	.....	.....
Totals	1,861	23	2,574	663	4,435	686
Other Ocean Ports	119	.....	.....	.....	119	.....
Grand Totals	126,590	319	25,007	15,938	151,597	16,257

TABLE 42.—Rejections, at Ocean Ports, by Causes and Nationalities, from 1902-3 to 1927-28

—	Fiscal Years																
	1902-03 to 1912-13	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	Totals
By Causes																	
Medical causes	4,162	398	319	34	30	12	19	21	99	60	37	130	83	40	95	104	5,643
Civil causes	5,094	1,429	679	129	144	59	51	641	854	1,023	595	862	948	226	594	215	13,543
Totals	9,256	1,827	998	163	174	71	70	662	953	1,083	632	992	1,031	266	689	319	19,186
By Nationalities																	
British	1,240	171	169	42	28	5	11	108	193	153	98	187	199	109	209	150	3,072
American	175	12	29	28	15	11	9	8	11	7	4	6	11	.....	5	2	333
Other countries	7,841	1,644	800	93	131	55	50	546	749	923	530	799	821	157	475	167	15,781
Totals	9,256	1,827	998	163	174	71	70	662	953	1,083	632	992	1,031	266	689	319	19,186

TABLE 43.—Deportations, after having been admitted, by Causes, Nationalities and Provinces, from 1902-3 to 1927-28

—	Fiscal Years																
	1902-03 to 1912-13	1913-14	1914-15	1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	Totals
By Causes																	
Medical causes	2,296	570	379	206	98	39	70	123	133	313	282	649	420	410	470	519	6,977
Public charges	2,853	715	789	635	161	91	103	158	236	950	679	775	543	506	354	430	9,978
Criminality	1,083	376	404	329	277	274	236	334	586	630	543	511	520	453	447	426	7,429
Other civil causes	530	163	128	68	60	84	35	22	52	105	76	93	58	189	149	257	2,069
Accompanying deported persons	145	10	34	5	9	39	10	18	37	48	52	78	145	158	165	254	1,207
Totals	6,907	1,834	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	1,686	1,716	1,585	1,886	27,660
By Nationalities																	
British	4,358	952	877	602	186	36	99	184	295	1,107	888	1,377	985	899	808	1,047	14,700
American	1,066	405	461	437	324	407	279	392	616	725	520	417	321	330	351	297	7,348
Other countries	1,483	477	396	204	95	84	76	79	133	214	224	312	380	487	426	542	5,612
Totals	6,907	1,834	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	1,686	1,716	1,585	1,886	27,660
By Provinces																	
Maritime Provinces	147	45	55	48	19	18	22	22	52	74	54	38	32	43	48	48	765
Quebec	1,589	371	397	236	108	123	96	118	174	297	277	301	206	233	233	240	4,999
Ontario	2,896	574	543	461	233	166	162	247	375	895	587	547	675	620	581	646	10,208
Manitoba	.....	334	199	143	40	59	21	40	66	228	180	802	242	195	177	279	
Saskatchewan	1,783	59	85	96	54	37	31	30	52	115	132	110	115	113	118	197	8,016
Alberta	.....	164	224	114	34	30	19	57	88	173	138	102	134	178	169	260	
British Columbia	491	287	228	145	116	91	103	141	237	264	264	206	282	334	259	216	3,664
Yukon Territory	1	.....	3	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Totals	6,907	1,834	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	1,686	1,716	1,585	1,886	27,660

REPORT OF THE CHIEF CONTROLLER OF CHINESE IMMIGRATION, A. L. JOLLIFFE

The head tax of $50 imposed upon Chinese in 1885, which was increased to $100 on January 1, 1901, and to $500 on January 1, 1904, was abolished under the provisions of the Chinese Immigration Act, 1923, which confines the entry to Canada of persons of Chinese origin, or descent, to members of the following classes:—

(*a*) Members of the diplomatic corps, or other government representatives, their suites and their servants, and consuls and consular agents;

(*b*) Children born in Canada of parents of Chinese race or descent, who have left Canada for educational or other purposes, on substantiating their identity to the satisfaction of the controller at the port or place where they seek to enter on their return;

(*c*) (1) Merchants as defined by such regulations as the minister may prescribe; (2) Students coming to Canada for the purpose of attendance, and while in actual attendance, at any Canadian university or college authorized by statute or charter to confer degrees.

During the fiscal year 1927-28 three Chinese immigrants were admitted to Canada; of these two were Chinese women who originally arrived in Canada during 1923 and who were admitted by virtue of a decision of the courts upon payment of the head tax in vogue at that time, and the other a merchant. Two students coming to attend Canadian universities, who will return to China when their studies have been completed, were admitted as non-immigrants. Eleven Chinese were deported during this period under various provisions of the Act.

Permits were issued under section 9 authorizing the temporary admission, for periods up to one year, of 75 Chinese, consisting mainly of actors and actresses under contract to appear in the different Chinese theatres, amahs, and servants of tourists, missionaries, students and teachers. Of this number 28 have left Canada within the year. In the case of actors, amahs, servants and teachers, cash or guarantee bonds are required by the department, guaranteeing that they will engage in no other wage earning occupation and that they will leave Canada within the period of their permit.

The registration carried on during 1923-24 shows a Chinese population in Canada of approximately 55,706. Of this number 48,305 were males, 1,302 females and 6,099 children under 18 years of age, distributed as follows:—

British Columbia	31,116
Alberta	4,657
Saskatchewan	3,961
Manitoba	2,146
Ontario	9,377
Quebec	3,753
New Brunswick	270
Nova Scotia	404
Prince Edward Island	19
Not specified	3
	55,706

Five thousand and eighty-seven Chinese registered out during the present year, as provided for in sections 23 and 25 in the case of Chinese leaving Canada with the declared intention of returning. This registration, for which a $2 fee is charged, entitles the registrant to re-entry within two years. The number of Chinese leaving Canada without registering out and the number allowing their registrations to lapse thereby forfeiting the right of readmission would appear to be increasing.

For the purpose of comparison the following table relating to Chinese immigration is given:—

—	Exemptions	Paying Tax	Percentage of total arrivals admitted exempt	Registered for leave	Total Revenue
					$
1912–13	367	7,078	4·93	2,742	3,549,242
1913–14	238	5,274	4·32	4,143	2,644,593
1914–15	103	1,155	8·19	4,373	588,124
1915–16	68	20	77·27	4,064	19,389
1916–17	121	272	30·79	3,312	140,487
1917–18	119	650	15·47	2,907	336,757
1918–19	267	4,066	6·16	3,244	2,609,669
1919–20	181	363	33·27	5,529	538,479
1920–21	1,550	885	63·56	6,807	474,332
1921–22	287	1,459	16·44	7,532	743,032
1922–23	59	652	8·30	6,682	434,557
1923–24	49	625	7·27	5,661	334,039
1924–25	.....	.....	.....	5,992	308,659
1925–26	.....	.....	.....	3,947	25,969
1926–27	.....	.....	.....	5,987	14,844
1927–28	1	2	33·33	5,087	25,679
	3,410	22,501	13·16	79,009	12,787,851

REPORT OF COMMISSIONER OF COLONIZATION, W. R. LITTLE

This report gives a summary of

(*a*) Empire Settlement work; and
(*b*) Immigration from the United States.

Empire Settlement

Assisted Passage Agreement.—The present Assisted Passage Agreement was made on January 3, 1927, between His Majesty's Secretary of State for Dominion Affairs and the Government of the Dominion of Canada. For the purpose of assisted passage under this agreement, migrants are divided into two classes, viz.,

1. Adults or persons over 17 years of age; and
2. Children or persons under 17 years of age.

Assistance is given only to migrants who are coming to Canada to earn their livelihood on the land or to engage in household work.

Adults.—The following is the appendix to the Assisted Passage Agreement and shows the amounts payable by the immigrant, the shipping companies, the Dominion Government and the Secretary of State in the cases of adults:—

APPENDIX

STATEMENT of Payments Based on Existing Specimen Rates (Subject to Modification in the Event of Alterations or Rates)

—	Total cost	Migrant	Shipping Company	Dominion Government		Secretary of State contribution	
			Passage	Passage	Aftercare	Against passage	Against aftercare
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Halifax, St. John and Quebec.	18 15 0	2 0 0	4 0 0	3 10 0		7 10 0	1 15 0
Montreal—							
via Quebec	19 15 5	3 0 0	4 0 0	3 10 0		7 10 0	1 15 5
via St. John or Halifax	20 15 0	3 0 0	4 0 0	3 10 0	An estimated average of Six pounds per head	7 10 0	2 15 0
Toronto—							
via Quebec	21 17 1	3 10 0	4 0 0	3 10 0		7 10 0	3 7 1
via St. John or Halifax	22 7 11	3 10 0	4 0 0	3 10 0		7 10 0	3 17 11
Winnipeg	23 19 2	4 10 0	4 0 0	3 10 0		7 10 0	4 9 2
Regina	24 14 2	5 0 0	4 0 0	3 10 0		7 10 0	4 14 2
Moose Jaw	24 15 10	5 0 0	4 0 0	3 10 0		7 10 0	4 15 10
Saskatoon	25 1 8	5 0 0	4 0 0	3 10 0		7 10 0	5 1 8
Calgary or Edmonton	25 14 2	5 10 0	4 0 0	3 10 0		7 10 0	5 4 2
Vancouver	28 7 9	8 0 0	4 0 0	3 10 0		7 10 0	5 7 9

Children.—For children eligible under the agreement, the assistance takes the form of a free grant of the total cost of transportation from the port of embarkation in the United Kingdom to the rail destination in Canada in the case of those proceeding.

(*a*) As members of families with parents or other approved guardians or proceeding to join their parents or other approved guardians or relations;

(*b*) To a home approved by the Dominion Government; or

(*c*) Under a scheme approved by the Oversea Settlement Department and the Department of Immigration.

For children migrating under the auspices of voluntary societies passage assistance is given at the rate of $80 per child to those destined to points east of Manitoba and $100 per child to those destined to points west of Ontario. These amounts are paid to the voluntary society on account of transportation. Of these amounts the voluntary society pays £11.10.0 per child for ocean transportation and the balance is applied to railway fare in Canada and administrative expenses.

Loans.—Where considered necessary and advisable, loans are made to migrants accepted under the 3,000 Family Scheme and to household workers. A household worker receives a loan up to the amount of the difference between the minimum ocean rate and the migrant's contribution to ultimate destination as shown in the index printed in this report provided that the loan does not exceed £6 per migrant. These loans are free of interest and are repayable by instalments as determined by the Department of Immigration.

3,000 Family Scheme.—The total number of families brought to Canada during the past three years under this Scheme was 2,669, comprising 14,946 persons. Of this number 5,180, including heads of families, were placed in farm and household work. Up to the end of the fiscal year there have been 314 withdrawals and cancellations.

New Brunswick Land Settlement Agreement.—An agreement was made on August 4, 1927, between His Majesty's Secretary of State for Dominion Affairs, the Government of the Dominion of Canada and the Government of the Province of New Brunswick for the settlement within a period of not more than six years of 500 families on improved farms in the province of New Brunswick. Under this Scheme, the Provincial Government provides the farm and the British Government advances $1,500 for stock and equipment. Repayment is made on a 25-year amortization basis with interest at 5 per centum per annum. The Dominion Government recruits and selects the families and co-operates with the Provincial Government in making adequate arrangements for reception and settlement. Families under this Scheme also participate in the Assisted Passage Agreement. Any loss of interest incurred on the price of a farm during the first two years as a result of the failure of a settler is shared as follows:—

Dominion Government	25 per cent
Provincial "	25 "
British "	50 "

Losses on stock and equipment are shared as follows:—

British Government	50 per cent
Dominion "	50 "

Arrangements have been made to recruit 100 families for settlement on improved farms in the Province of New Brunswick during 1928. Prior to the end of the fiscal year three families had arrived and 71 had been approved for sailing.

Nova Scotia Land Settlement Scheme.—On December 5, 1927, an agreement was made for the settlement within a period of not more than six years of 500 families on improved farms in the Province of Nova Scotia. This Scheme is similar to the New Brunswick Land Settlement Scheme but has not yet come into operation.

Manitoba.—The Department of Immigration negotiated with the British Government a Scheme for the settlement of 200 British families on improved farms in the Province of Manitoba. This Scheme is similar to the New Brunswick and Nova Scotia Schemes but has not yet been finally approved by the Provincial Government of Manitoba.

Provincial Reception and Distributing Farms

For many years juvenile migrants have been brought to Canada under the auspices of voluntary immigration societies.

Tripartite agreements, however, have now been made with several Provincial Governments for the operation of provincial reception and distributing farms. Boys between 14 and 17 years of age brought to Canada under these Schemes are received at provincial headquarters farms and then placed in selected farm homes. The wages commence at $10 per month plus board and lodging, washing and mending. The farmer undertakes to pay the boy a certain sum each month and to remit the balance to the Provincial Government to be placed to the boy's credit. The Provincial Government selects the home, furnishes aftercare, advice, protection and what supervision is necessary for a boy's welfare for a period of three years after his arrival in Canada.

Voluntary societies may operate through provincial centres by supplying the colonization officials of Provincial Governments with the names and addresses of suitable homes for the placement of boys, and by the oversea representatives of voluntary societies submitting the names and addresses of suitable boys to the oversea agents of the Provincial or Dominion Governments.

The Provincial Government supplies the farm and the following cash contributions are made on account of the operation of the farm:—

Provincial Government	$10	per boy
Dominion Government	$10	"
British Government	$20	"
Total	$40	"

The British Government and the Dominion Government share equally in the cost of transportation.

Ontario.—The Ontario Government have established a farm at Vimy Ridge, near Guelph, as a reception and distributing centre. These boys are placed in employment with farmers who have been selected by the Ontario Government. During the fiscal year 399 boys were received at and distributed from this centre.

Manitoba.—The Provincial Government of Manitoba have designated the Manitoba Agricultural College as a reception and distributing centre; 101 boys were brought forward and placed through the Manitoba Agricultural College.

New Brunswick.—The Cossar Farm at Lower Gagetown has been designated as a provincial headquarters farm for the reception and distribution of British boys.

Nova Scotia.—The department has been negotiating with the Provincial Government of Nova Scotia with a view to establishing a reception and distributing centre in that province.

Similar proposals were made to the other western provinces who, so far, have decided not to participate in this Scheme.

British Immigration and Colonization Association.—This association has established a farm on the island of Montreal as a reception and distributing centre for boys destined to eastern Ontario and the Eastern Townships.

Boys' Land Settlement Scheme

This Scheme is a further development of the provincial training centres for British boys. An agreement was made on the 1st of July, 1927, between the British and Canadian Governments which involves an expenditure of $5,000,000 between 1928 and 1937 for the settlement of British boys on farms in Canada. The agreement is applicable to settlers from the United Kingdom,—

(*a*) who (i) have proceeded to Canada since the date of the Empire Settlement Act, i.e. May 31, 1922, provided that preference shall be given to settlers who have been trained at the provincial headquarters farms; (ii) have attained their 14th but not their 20th birthday at the time of their arrival in Canada; (iii) have not come to Canada with their parents or to join their parents in Canada;

(*b*) who have reached their 21st but not their 25th birthday at the date of application for assistance;

(*c*) who are in possession of savings amounting to approximately $500;

(*d*) who have acquired the necessary experience of farm work in Canada by working as agricultural labourers for wages or in such other manner as the Dominion Government may consider sufficient provided that the Dominion Government shall be satisfied that the applicants are industrious, economical and capable of managing a farm;

(*e*) in respect of whom a Provincial Government makes a cash contribution of not exceeding $250 per settler.

The agreement provides that the total advance in each case shall not exceed $2,500. Of this amount $1,250 is to be advanced by the British Government, $1,000 by the Dominion Government, and $250 by the Provincial Government. Several Provincial Governments have already agreed to participate in the above Scheme and agreements are now being negotiated between the department and several Provincial Governments.

The Land Settlement Schemes mentioned in this report involve an estimated expenditure of $24,000,000, excluding settlement or administrative expenses and cost of transportation.

NOMINATIONS

In the annual reports for the years 1925-26 and 1926-27, respectively, an explanation was made regarding direct, descriptive and bulk nomination. The first reduced passage agreement became effective on January 1, 1926. Prior to that date loans were made to migrants for transportation and nominations were endorsed throughout the country by managers of chartered banks, who rendered splendid co-operation. One of the main objects of the reduced rate was to reduce loans to a minimum and thereby reduce the cost of collection. When loans had, therefore, in a large measure, been discontinued, it was not necessary to have the nomination forms endorsed by bank managers. The district land superintendents of the department were then instructed to investigate and report on nomination cases arising in Canada. Every effort was made to develop the direct nomination system with its offer of satisfactory placement and annual employment in preference to bulk nomination which, during the past year, disclosed a comparatively small percentage of satisfactory settlement. Any British subject resident in Canada may nominate any experienced or inexperienced farm or household worker.

Bulk Nomination.—The department assumed responsibility for the placement of all experienced farm workers and household workers, who could be recruited through departmental sources in Great Britain, and instead of fixing quotas for farm workers as in the previous year, invited the Colonization Departments of the two Canadian railways, the Hudson's Bay Company and other organizations, to place in the hands of the district superintendents of the Land Settlement Branch of the department estimates of the number of experienced or inexperienced farm workers they could satisfactorily place in each district. By this system it was possible to eliminate delay and group movement could be increased or reduced from month to month as the circumstances required. Co-operation in recruiting was welcomed from every source, but the responsibility for final selection of those who received assisted passage rested with oversea officials of the department.

Aftercare.—Under the Assisted Passage Agreement, the department has undertaken to give aftercare for a period of five years. Against aftercare service the British Government makes a cash equation, which was one of the main factors in establishing the reduced rate. Every organization furnishes the department with a statement showing the name and address of the farmer who employs the migrant. This information is necessary so that the service of aftercare can be rendered.

The department has a subsidiary agreement only with the British Settlement Society of Canada which undertakes recruiting, placement and aftercare.

UNITED STATES

The office at Portland was closed on October 31, 1927, and the immigration work in the Portland area was assigned to the agent at Manchester, N.H. There are now sixteen Information Bureaux in the United States.

SUMMARY of the Results of Immigration Work at each Canadian Information Bureau in the United States for the fiscal year ended March 31, 1928.

Agency	Number of inquiries	Settlers reported by		Number carloads	Value of carloads and effects	Good prospects outstanding
		Agent	Stat.Br.			
					$	
Fargo	4,350	2,059–2,785	2,280	134	4,792,430	1,151
Detroit	2,030	755–1,169	3,992	9	1,886,215	223
St. Paul	2,667	633–1,141	1,174	79	975,700	437
Great Falls	1,843	751–1,036	1,035	24	712,835	351
Spokane	1,961	543–1,020	2,834	12	1,591,050	628
Kansas City	2,837	532– 952	675	14	1,261,845	485
Omaha	1,857	534– 854	728	48	690,650	150
Harrisburg	1,952	438– 690	1,547	9	289,050	356
Woonsocket	686	189– 537	700	15	119,750	207
San Francisco	1,593	188– 463	1,383	2	402,120	47
Chicago	1,461	188– 368	1,407	8	694,100	312
Syracuse	910	185– 300	2,779	1	755,075	144
Manchester / Portland	551	167– 353	1,169	3	205,250	221
Boston	458	126– 222	1,290	.....	185,425	108
Indianapolis	1,039	123– 240	683	5	344,700	268
Columbus	1,338	85– 156	1,102	1	65,475	39
Alaska, Hawaii and not given	.....	.....	229	.....	.....	.....
1927–28 Total	27,533	7,496–12,286	25,007	364	14,971,670	5,127
1926–27 Total	18,540	10,590	21,025	337	14,002,375	5,165
Increase	8,993	−1,696	3,982	27	969,295	

The above table has been prepared on the basis of the volume of business transacted by each agent, e.g., a total of 2,785 persons from Fargo, the lowest being 156 as reported by the agent at Columbus, Ohio. The first column under the heading "Settlers reported by Agent" shows the heads of families and single persons other than heads of families. The second column includes the total reported by the agent. In the column showing "Settlers reported by Stat. Br." is also included those who were not reported by the agents in the various districts but who were examined upon application for entry at the boundary port. A considerable number of settlers from the United States enter Canada by automobile. The statement regarding the "Value of carloads and effects" is prepared from information given by the settler to the immigration agent.

Agricultural products were displayed at sixty-five exhibitions, where a total of 951 good prospects were established.

REPORT OF THE DIRECTOR OF EUROPEAN EMIGRATION, J. BRUCE WALKER

I beg to submit herewith the annual report of the Director of Emigration for Canada in Europe for the year ended March 31, 1928.

You will find attached hereto divisional reports dealing with various aspects of the work. These will speak for themselves, and I only desire to offer a word or two on the general conditions with respect to emigration to Canada from Europe.

The last three months of the fiscal year have shown a slight decrease in the volume of the movement, as compared with the same period in 1927. This decrease is due to several more or less correlated causes. There is something of a slump in marine transportation of every kind. We were later than usual

last fall in starting our advertising operations. The reduction in the number of farms available for families under the 3,000 scheme had a marked influence on the movement, and from one cause or another—chiefly hostile propaganda from certain sources—a good deal of prejudice had been worked up against the Canadian medical examination, particularly in the British Isles. These influences have combined to reduce the flow, but I am satisfied that while these influences may have reduced the flow, they have not reduced the quality of the migrant, and, after all, mere numbers is not everything.

It was natural that with the introduction of a new scheme such as the Canadian medical examination, there should have been difficulties, incongruities and delays. These were not, however, due either to the scheme or to the conception of it, but rather to the natural inexperience in the application of the regulations, and to some disinclination to submit to a medical examination that had been wrongly advertised as severe and restrictive. The immediate shipping interests and their ramifications throughout the country looked with suspicion upon the Canadian medical examination, and some interests sought the medium of the public press to criticize our action; all these influences, some more, some less, militated against the increase in numbers which we had reason at one time to expect should have marked our efforts in Europe this year.

The medical examination is becoming generally accepted, the difficulties and delays incidental to a new system are passing away, and the machine is beginning to work smoothly. A noticeable change in the sentiment of the shipping interests and their representatives has been due to the readiness with which the medical health authorities have sought to meet the criticism and complaints of interested parties.

I am confident that the year that is coming will show a constantly increasing stream of a most desirable class of persons making Canada their permanent objective. If it is found possible to get the year's emigration efforts started in the early fall instead of later results will come more readily, more satisfactorily and more economically.

The whole staff in Europe has worked cordially and enthusiastically, and I believe entirely in the interests of our Dominion. To the loyalty and efficiency of my immediate aides I pay a grateful tribute.

Emigration Work

The following is a summary covering the work of the emigration agents in the British Isles.

Lectures.—The lecture season this year was again concentrated into the month of October, after which the provincial agents gave their time to the after-work of interviewing prospects and following up the interviews secured at their lectures. A total of 347 lectures was delivered as per the schedule given below.

Summary of Statistics for Lectures, 1927-28 Season

District	Total number lectures	Attendance at lectures	Families	Prospects single	Domestics
Bangor	40	13,404	41	79	5
Belfast	31	9,190	35	64	3
Birmingham	47	6,922	28	26	4
Bristol	29	3,087	16	8	1
Glasgow	35	4,548	34	44	5
Inverness	51	2,968	5	20	4
Liverpool	50	6,440	15	44	11
London	37	2,790	5	2	5
York	27	3,703	8	8	1
Totals	347	53,052	187	295	39

In addition to the above lectures, many were given at military centres in the United Kingdom, at the request of the War Office; also several lectures were given to the Ministry of Labour trainees, and at Women's Guilds.

The expenditure on lectures was £2,368 3s. 3d.

Lantern Slides.—We have had many demands for the loan of lantern slides. During the year the sets in use in the United Kingdom were shown about 640 times. From our stock in the London office we loaned sets of slides on no fewer than 214 occasions. The demand for these slides came from all parts of the British Isles.

Films.—There is an increasing demand for the use of films, and during the year the supply at the London office was frequently insufficient to meet the demand. The film "Twenty Minutes in Canada" has been in use for such a prolonged period that the request is usually for something new, which as yet we are unable to supply.

Exhibitions.—During the year we were represented at 103 Agricultural Shows. These shows were attended by a total of 890,630 visitors, and the Canadian Government stands were visited by 256,928 persons, and 190,052 pieces of literature were distributed. Below is a summary of statistics of Agricultural Shows attended this year:—

SUMMARY of Statistics for Agricultural Shows, 1927 Season

District	Total number of shows	Total attendance at shows	Total attendance at stands	Literature distributed	Prospects		
					Fams.	Sing.	Dom.
Bangor	16	72,559	23,800	19,375	68	130	5
Belfast	10	97,297	31,700	27,500	3	5	.....
Birmingham	11	90,811	22,620	20,920	32	24	.....
Bristol	13	179,625	58,334	24,697	23	60	1
Glasgow	15	132,800	29,179	17,760	73	26	.....
Liverpool	18	179,711	42,120	40,650	62	84	.....
London	4	32,870	22,000	19,000	8	12	.....
York	16	104,957	27,175	20,150	29	16	1
Totals	103	890,630	256,928	190,052	298	357	7

These prospects figures include only names and addresses actually given to our officers attending the Shows. There is a natural indisposition on the part of farm workers and others to come forward at these Shows for fear of the effect such a visit may have on their present employers; some seek for information at the stands and many of them write in afterwards. We have found that many callers at our various exhibition stands state that they prefer not to give their names and addresses.

In addition to the Agricultural Shows, there was a large number of Empire Displays, Empire Fairs, Fetes, Shopping Weeks, etc., to which we were able to send exhibits. At these functions there was very little opportunity of obtaining the names and addresses of people, but undoubtedly such displays have a beneficial effect on the work of the Department.

The sum expended on exhibitions and exhibits was £2,171 17s.

Motor Exhibition Wagons.—During the season the two exhibition motor wagons were able to visit 412 towns and villages. The majority of these were off the beaten track and in districts remote from centres where Agricultural Shows were held. The wagons also visited 84 schools, at which the exhibits were displayed to the pupils who were paraded while the attendant on the wagon delivered a short talk on Canada. As a rule we find schoolmasters in

the British Isles are favourably disposed towards a visit from our officers, and on all visits the senior pupils are given copies of the Atlas, and a wall map is left with the teacher for school use.

Below is a schedule showing the work of the exhibition wagons during the fiscal year, from which it will be noted that the total mileage covered was 3,772. The wagons were opened for display at 35 markets, and 98,935 pieces of literature were distributed.

STATISTICS *re* Exhibition Wagons, Fiscal Year 1927-28

—	Towns and villages visited	Schools visited	Markets attended	Shows attended	Miles run	Prospects secured			Interviews held	Literature dist.
						F.	S.	D.		
Car No. 1	112	16	25	7	1,369	5	29	4	86	53,435
Car No. 2	300	68	10	1	2,403	....	18	....	.....	45,500
	412	84	35	8	3,772	5	47	4	86	98,935

It has frequently been found desirable to utilize the exhibition motor wagons at small Shows. There were a number of requests for the wagons to participate in pageants, with which it was not possible for the department to comply, as the wagons were otherwise employed.

The total expenditure on account of the two motor wagons was as under:—

Car No. 1—£299 13s. 10d.
Car No. 2—£327 0s. 1½d.

Advertising.—The newspaper advertising for the department was placed in the hands of Messrs. G. Street & Co., Limited, and at the beginning of January advertisements were inserted in 457 newspapers and journals in Great Britain and Northern Ireland. From time to time as the necessity arose, the list was slightly augmented. Attention was concentrated on the various schemes for settling men and youths on the land and women in domestic service. In addition to the standard advertisements a very considerable number were inserted by the agents in the provinces for the purpose of advertising their lectures, meetings and interviews with prospects, etc.

The total sum expended in advertising during the fiscal year was £10,073 13s. 7d.

Canadian Official Press Bureau.—The Canadian Official Press Bureau continued to actively officiate throughout the year, and during the period under review secured widespread publication of propaganda matter in the columns of the British press. About sixty per cent of the items appeared, and the returns for this year show an average of 500 a month. The total number of articles and items sent out was 1,186, and the aggregate circulation of the journals in which these appeared was 368,274,165.

Literature.—Over half a million pamphlets were distributed throughout the British Isles during the year. Some literature printed in the French language was despatched to the continental offices for distribution there. The booklet, "Sixty Years of Canadian Progress," has fulfilled a need for something less expensive than the Year Book, containing, as it does, useful statistics, and the book is welcomed by lecturers, teachers and journalists.

Towards the close of the fiscal year considerable consignments were received, including new editions of "Farm Opportunities in Canada" and "The Houseworker in Canada", also the newly published "On the Doorstep of Prosperity in Western Canada", which is likely to prove very popular.

The issue by the department of a calendar, 65,000 of which were sent to the British Isles for circulation, aroused great interest in the Dominion and increased the demand for literature, particularly in rural schools, following notices in educational journals. School teachers throughout the United Kingdom are unanimous in asserting that the Descriptive Atlas of Canada is the most interesting, attractive and useful handbook they have seen. After it has been used in class, children are allowed to take their copies home, and thus the interest of the parents in the Dominion is aroused.

The following literature has been received and distributed during the fiscal year:—

Pamphlets Received	—	Pamphlets Distributed		—
On hand 31-3-27	554,254	By Agents	311,640	
		By London	107,562	
From the Department	615,650	By Cars	98,935	
				518,137
From other sources	10,551	On hand 31-3-28		662,318
Total	1,180,455	Total		1,180,455

Peonies.—During the months of June and July consignments of peonies aggregating 100,000 blossoms were received in this country. Almost without exception the blooms arrived in perfect condition and only partially expanded. Supplies were sent to each office in the United Kingdom for distribution in quarters where they were most likely to be of good advertising value to Canada. It is not too much to say that the appearance of these peonies created quite a sensation. Bunches were sent to Their Majesties, prominent statesmen, the cabinet and members of Parliament, but were chiefly displayed in the windows of booking agents. These flowers lasted well, and were certainly one of the best advertisements Canada has had for a long time, and I feel sure the exhibit went a long way in removing the impression that Canada is a land of snows.

Empire Settlement Warrants.—I attach a schedule showing the number of persons who have received assistance under the Empire Settlement Agreement, and in whose favour warrants have been issued.

SUMMARY

—	Warrants	Persons
Ottawa and Agents Nominations	8,932	12,015
Family Settlement Schemes	776	4,690
Women's Section Cases	4,470	4,913
	14,178	21,618

Hereunder is a statement, showing the increase in passengers, warrants and household workers for the fiscal year ended March 31, 1928, over the fiscal year ended March 31, 1927:—

ANALYSIS of Empire Settlement Warrants issued under the following headings during the fiscal year 1927-28 (April 1-March 31)

Office of Origin	Ottawa Nominations					Agents' Nominations						
	M.	F.	C.	No. of persons	No. of Wts.	M.	F.	C.	No. of persons	No. of Wts.	Total persons	Total Wts.
Bangor	79	42	94	215	89	148	19	21	188	158	403	247
Belfast	100	40	77	217	113	493	44	63	600	528	817	641
Birmingham	65	22	63	150	79	117	8	12	137	126	287	205
Bristol	65	30	51	146	79	94	13	11	118	97	264	176
Dublin	1	1	3	5	2	58	5	6	69	58	74	60
Glasgow	232	104	236	572	259	363	29	41	433	391	1,005	650
Inverness	64	26	62	152	73	257	10	44	311	283	463	356
Liverpool	145	56	123	324	168	185	15	18	218	198	542	366
London	206	107	206	519	271	372	19	36	427	394	946	665
York	161	80	148	389	181	152	29	37	218	158	607	339
									2,719		5,408	3,705
Alberta Training Scheme											54	54
Brit. Settlement Society											510	228
C.N.R.											2,927	2,492
C.P.R.											2,577	1,989
Chiselden War Office Trainees											8	8
Church of England Council											21	21
Cornton Vale											39	39
Dr. Cossar											2	2
Govan Parish Council											10	10
Hudson's Bay Co.											242	242
Father McDonell											171	43
Manitoba Farm Training Scheme											50	50
Ministry of Labour											246	246
Nova Scotia Gov't											41	29
Ontario Gov't											1,292	1,063
Quarrier Homes											3	3
Salvation Army											62	62
United Churches of Canada											15	15
Waifs and Strays											3	3
Totals	1,118	508	1,063	2,689	1,314	2,239	191	289	2,719	2,391	13,681	10,304
Cancellations	61	45	88	194	77	306	25	10	341	315	1,666	1,372
Net Totals	1,057	463	975	2,495	1,237	1,933	166	279	2,378	2,076	12,015	8,932

ANALYSIS of Empire Settlement Warrants Issued During the Fiscal Year 1927-28. (April 1-March 31). Family Settlement Schemes

Office of Origin	3,000 Families Scheme					New Brunswick Scheme					Nova Scotia Scheme					Total persons	Total warrants
	M	F	C	Number of persons	Number of warrants	M	F	C	Number of persons	Number of warrants	M	F	C	Number of persons	Number of warrants		
Bangor Office	111	96	320	527	84	9	10	31	50	7	....	....	....	....	....	577	91
Belfast Office	169	159	574	902	134	8	10	42	60	6	....	....	....	....	....	962	140
Birmingham Office	56	56	143	255	51	2	1	4	7	1	....	....	....	....	....	262	52
Bristol Office	54	53	181	288	46	4	4	13	21	4	....	....	....	....	....	309	50
Dublin Office	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Glasgow Office	245	241	715	1,201	200	6	6	32	44	5	....	....	....	....	....	1,245	205
Inverness Office	49	52	197	298	46	4	4	16	24	4	....	....	....	....	....	322	50
Liverpool Office	111	101	306	518	96	3	3	11	17	3	....	....	....	....	....	535	99
London Office	63	61	199	323	58	14	12	43	69	11	....	....	....	....	....	392	69
York Office	133	123	405	661	116	7	6	18	31	6	....	....	....	....	....	692	122
Totals	991	942	3,040	4,973	831	57	56	210	323	47	....	....	....	....	....	5,296	878
Cancellations	122	117	358	597	101	2	2	5	9	1	....	....	....	....	....	606	102
Net Totals	869	825	2,682	4,376	730	55	54	205	314	46	....	....	....	....	....	4,690	776

ANALYSIS of Empire Settlement Warrants Issued During the Fiscal Year 1927-28 (April 1-March 31). Women's Section Cases

Office of Origin	Ottawa Nominations*													Agents and Other Nominations														
	Joining husband					Others								Joining husband					Others									
	F.	M.	C.	No. of persons	No. of Wts.	F.	M.	C.	No. of persons	No. of Wts.	Household workers	Total persons	Total warrants	F.	M.	C.	No. of persons	No. of Wts.	F.	M.	C.	No. of persons	No. of Wts.	Household workers	Total persons	Total warrants	Grand total persons	Grand total warrants
Bangor	14	....	19	33	12	6	1	5	12	5	19	64	36	....	....	....	....	....	....	....	....	....	....	64	64	64	128	100
Belfast	18	....	59	77	18	6	2	9	17	7	59	153	84	....	....	....	....	....	....	....	....	....	....	609	609	609	762	693
Birmingham	5	....	8	13	5	2	....	5	7	3	59	79	67	....	....	....	....	....	....	....	....	....	....	77	77	77	156	144
Bristol	7	....	7	14	6	6	....	7	13	6	31	58	43	....	....	....	....	....	....	....	....	....	....	76	76	76	134	119
Dublin	2	....	4	6	2	....	....	....	....	....	....	6	2	....	....	....	....	....	....	....	....	....	....	1	1	1	7	3
Glasgow	21	....	52	73	21	19	5	50	74	28	247	394	296	1	....	....	1	1	....	....	....	....	....	1,208	1,209	1,209	1,603	1,505
Inverness	....	....	....	....	....	1	....	3	4	2	56	60	58	....	....	....	....	....	....	....	....	....	....	116	116	116	176	174
Liverpool	22	....	44	66	20	24	3	27	54	22	98	218	140	....	....	....	....	....	....	....	....	....	....	216	216	216	434	356
London	33	....	37	70	26	21	1	36	58	24	169	297	219	....	....	....	....	....	1	....	2	3	2	447	450	449	747	668
York	21	1	33	55	19	16	....	27	43	21	96	194	136	....	....	....	....	....	....	....	....	....	....	221	221	221	415	357
																								3,035	3,039	3,038	4,562	4,119
Brit. Settlement Society	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14	14	14	14	14
C.P.R.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	2	1	....	2	1	2	1
Ontario Gov't	....	....	....	....	....	....	....	....	....	....	....	....	....	10	1	22	33	9	4	....	16	20	7	372	425	388	425	388
Salvation Army	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	363	363	363	363	363
Totals	143	1	263	407	129	101	12	169	282	118	834	1,523	1,081	11	1	22	34	10	6	....	19	25	10	3,784	3,843	3,804	5,366	4,885
Cancellations	11	....	31	42	11	4	....	6	10	5	43	95	59	1	....	2	3	1	....	....	....	....	....	355	358	356	*453	*415
Net totals	132	1	232	365	118	97	12	163	272	113	791	1,428	1,022	10	1	20	31	9	6	....	19	25	10	3,429	3,485	3,448	4,913	4,470

*These numbers include:—36 Ontario Government warrants covering 38 persons.
46 Salvation Army warrants covering 46 persons.

EMPIRE SETTLEMENT WARRANTS AND EXPENDITURE

—	Passengers	Warrants	Household workers
1927-28	21,618	14,178	4,913
1926-27	17,765	9,524	3,970
Increase over 1926-27	3,853	4,654	943

The total amount expended on account of Assisted Passages was as follows:—

	£	s.	d.
(a) Nominated passages	193,040	8	1
(b) Family settlement scheme	89,796	12	4
(c) Household workers	61,615	2	8
(d) Juveniles "A"	29,320	2	4
Juveniles "B"	1,361	18	3
	375,134	3	8
In addition to which there has been expended for salaries, administration expenses, refunds, etc., the sum of	3,812	12	10
Making the total Empire Settlement expenditure during the fiscal year 1927-28	378,946	16	6

(These figures include expenditures by the British Government.)

British Family Settlement Scheme.—We are engaged this year in completing the 3,000 British Family Scheme, under which the Governments of Great Britain and Canada are co-operating to settle families on farms in Canada.

Family applications to the number of 931 have been investigated during the past fiscal year and submitted for the consideration of the London office and the Oversea Settlement Committee. The net approvals, after deducting withdrawals and cancellations are 611 families.

During the fiscal year 876 families, comprising 4,368 souls sailed for Canada under this Scheme.

This spring we are forwarding families under the 500 British Family Scheme of the province of New Brunswick. Under this Family Settlement Agreement the province of New Brunswick provides the land for the settlement of the families. In other respects conditions are similar to the 3,000 British Family Settlement Scheme. It is proposed to forward one hundred families during 1928 for settlement in New Brunswick. 78 families have been accepted up to this date under the scheme. 14 families have sailed, comprising 68 souls.

Following are statements showing the action taken on family applications under the 3,000 Family Settlement Scheme and the New Brunswick Family Scheme.

CANADIAN NOMINATIONS

Families			Single Men		
In hand at commencement of fiscal year 1927-28		195	In hand at commencement of fiscal year 1927-28		242
Received during year		648	Received during year		1,260
		843			1,502
Sailed	423		Sailed	759	
Rejected	87		Rejected	113	
Withdrawn	210		Withdrawn	390	
		720			1,262
In hand and receiving attention at end of fiscal year		123	In hand and receiving attention at end of fiscal year		240

Family Settlement Scheme, Fiscal Year 1927-28

Agency	Under consideration 31-3-27	Total cases submitted	Under consideration 31-3-28	Dealt with by head office	Disposition							
					Rejected by head office	Rejected, other causes or withdrawn	Total cases approved	Rejected, medically unfit	Rejected O.S.O.	Withdrawn	Net approvals	Sailed
Bangor	2	96	2	96	8	10	78	1	....	21	56	89
Belfast	1	156	1	156	7	10	139	2	1	43	93	118
Birmingham	1	53	.....	54	7	1	46	2	....	7	37	55
Bristol	3	60	3	60	4	.....	56	....	1	18	37	46
Glasgow	1	234	2	233	13	17	203	4	....	41	158	206
Inverness	2	32	.....	34	....	1	33	1	....	15	17	71
Liverpool	2	70	1	71	3	4	64	1	....	12	51	85
London	1	52	2	51	2	1	48	....	....	11	37	51
York	2	136	5	133	6	10	117	2	....	30	85	115
Canada	5	38	.....	43	....	2	41	....	1	....	40	40
	20	927	16	931	50	56	825	13	3	198	611	876

New Brunswick Family Scheme—Statement as at March 31, 1928

Agency	Cases approved Mar., 1928	Total cases submitted	Under consideration	Dealt with by head office	Disposition							
					Rejected by H.O.	Rejected by O.S.O.	Withdrawn or transferred F.S.S.	Total approved cases	Rejected medically unfit	Withdrawn	Net approvals	Sailed
Bangor	4	19	3	16	1	.....	3	12	.....	3	9	2
Belfast	.....	18	1	17	1	.....	2	14	1	2	11	7
Birmingham	1	5	.....	5	1	.....	1	3	.....	1	2	.....
Bristol	2	18	1	17	.....	.....	6	11	.....	.....	11	.....
Glasgow	3	20	2	18	2	.....	1	15	.....	3	12	1
Inverness	1	9	.....	9	1	.....	2	6	.....	1	5	.....
Liverpool	3	11	3	8	.....	.....	1	7	.....	.....	7	.....
London	1	16	2	14	.....	.....	3	11	.....	.....	11	2
York	2	17	2	15	1	.....	1	13	.....	3	10	2
	17	133	14	119	7	.....	20	92	1	13	78	14

Household Workers.—At the present time there are eight Women Officers on duty in the British Isles at the undermentioned Points:—

Headquarters, London	1
London Agency	1
Glasgow	2
Liverpool	2
Belfast	2

During our busy season, it has been necessary to detail the Assistant Woman Officer, Liverpool, to assist at the York Agency.

Hereunder is a statement, showing the number of sailing permits issued to unaccompanied women, by Provinces, during the fiscal year 1927-28:—

—	Total permits issued	Destined to hostels
Nova Scotia	68	29
New Brunswick	28	7
Quebec	1,289	662
Ontario	4,500	2,190
Manitoba	458	178
Saskatchewan	582	255
Alberta	519	252
British Columbia	608	165
	8,052	3,738

Juvenile Emigration.—The following statement shows the number of children who have migrated under the auspices of the Juvenile Emigration Societies, under the Empire Settlement Act during the fiscal year:—

Church of England Council of Empire Settlement	129
Church Army	164
Salvation Army	96
Catholic Emigration Society	264
Orphan Homes of Scotland	48
Dr. Cossar	70
Fegan's Home	40
Church of England Waifs and Strays Society	117
British Immigration and Colonization Association	818
Dr. Barnardo's Homes	103
National Children's Home and Orphanage	34
Middlemore Homes	12
Mr. Oliver Hind	7
	1,902

These figures show an increase of 319 children on the number that proceeded in the fiscal year 1926-27.

Correspondence.—The number of letters received and despatched during the past fiscal year is as follows:—

Letters received—460,462;
Letters despatched—513,876,

showing an increase as compared with the previous fiscal year of 43,879 and 27,942.

Parcels.—The number of parcels despatched from the London office during the fiscal year 1927-28 was 36,872, as compared with 29,432 during the last fiscal year.

Callers.—

London office	20,259
Agencies	81,919
	102,178

The following extracts from the individual reports of our various Agencies will no doubt be of interest:—

Liverpool Agency

In submitting the annual report for the Liverpool office and district, for the year ended March 31, 1928, I have to record a year of strenuous activity on the part of all interested in migration, and if it was possible to record at the same

time a result in proportion to the efforts put forth then the movement Canadawards would be much larger than it is at the present time, but on all sides one hears of a general indifference with regard to migration and as a consequence a smaller movement. While it may be difficult to assign any one reason for this condition of affairs, there is general agreement that the continued payment of unemployment benefits is one of the chief causes. The availability of unemployment insurance undoubtedly creates a feeling of security in the minds of those who would otherwise give greater thought to their future and look overseas for the opportunity and prospects denied them and their dependents here. As far as experienced agriculturists are concerned, there are few, if any, farming districts in which there is a surplus of this class of help, and farming employment as a rule is good and at fairly high wages. Another contributory cause is the fact that a certain section of the British press has given space to adverse publicity regarding our Dominion, and this creates a feeling of uncertainty in the minds of would-be migrants who do not always hear of the successful settler. It has been the constant work of the staff to use all the various channels of our activities to counteract these adverse influences. Early in the season our attendance at seventeen agricultural shows gave the opportunity of personal contact with inquirers many of whom came from agricultural districts, and who were not only interested to view our display of Canadian products, but sought information and while showing interest some inquirers indicated in the course of conversation satisfaction with their present circumstances and employment, and did not show any particular desire to look beyond immediate prospects and what their future might be by taking advantage of the greater opportunities and broader outlook awaiting in our Dominion. It is with such inquirers that we make good use of the very satisfactory letters we continue to receive from those who have migrated from this district, and with whom I make it my aim, as far as possible, to keep in personal touch.

Birmingham Agency

The number of callers at the office is also lower than in the previous twelve months and the number of letters received slightly fewer. There may be many explanations for this but certainly one that applies to this particular district is that industrial life is showing more activity in the Midlands of England than at any time since the war. Furthermore, the depression in agriculture has sent men to seek work in the towns, and when they have well-paid employment they do not look our way. I do not think that the criticisms of Canada which have cropped up occasionally have had a widespread effect so far as this area is concerned, though no doubt some persons are deterred by this kind of thing.

Two features, however, of our work show a pleasing record. The number of people with capital now going forward is distinctly on the increase, and the number of domestic servants of a really good type is markedly in advance of that shown last year.

As regards the outlook for the future, it is very difficult to attempt to prophesy. It is certain that people discuss Canada more than at any time for years past, but it is equally certain that when industrial life is active and there is growing opportunity of getting work here people of the working-class type will prefer to remain in familiar surroundings. This district is becoming more and more industrialized, and Birmingham, Coventry, Walsall, and Wolverhampton are drawing man-power from the surrounding districts. It seems that this will soon be just one huge city.

Bristol Agency

During the months of October and November twenty-nine lectures were given by this agency. They were all well attended and literature distributed

at each; also information and interviews were given before and after. At some quite a number of names and addresses were obtained, but, as usual, both married and single men hesitate to make themselves conspicuous and give their names for fear of it getting to the knowledge of the farmers or others for whom they are working. However, many of these we get correspondence from afterwards. As to the amount of good done either at lectures or shows it is difficult to estimate, but I believe both are well worth what they cost, and it is often a long wait for results. Two instances have come to my knowledge this winter, which I think are well worth mentioning. In the first case I was asked to meet three farmers in the county of Cornwall whom I did not know. The interview disclosed that each of them had met me some time ago at shows and lectures. They intend going to Canada this summer to look out farms for themselves, and they have considerable capital. In the other instance, just at the close of the war I lectured at Kingston in Somerset, and lately a Mr. J—— called on me and reminded me of my lecture given in the school house and said that his eldest son was so impressed by the lecture, although he was only then at school, that after leaving he went to Nova Scotia and worked with farmers in that province for three years. During that time he decided there was a great opening in that province for the manufacture of pure jams and marmalade. He returned to England, took a year's course at a university in scientific methods of jam-making, and now has an up-to-date jam factory in Nova Scotia with a capacity of two tons of finished product per day. He is also putting in a hydraulic cider press.

York Agency

The past year has been one which shows that the interest in Canada is maintained in this district and in certain phases of the work has shown marked improvement.

One of the noticeable features has been the increased number of women going forward to engage in household work, an increase of 38 per cent over 1927 being recorded. The increase is largely to be found in the numbers proceeding under the Empire Settlement Act at the reduced rates.

A further increasing and important branch is that concerning boys for farm placement between the ages of 14 and 17. In this connection a very strong Committee in Newcastle has taken up the question and has provided a well equipped training hostel, as well as making arrangements for some practical work in handling horses and simpler implements with large horse transport concerns and farmers in the Newcastle District. This is a line of endeavour calling for every possible encouragement.

A very large increase in the number of applicants for training on farms in England under the Ministry of Labour Scheme prior to proceeding to Canada has been shown over the previous year. It is further of special note that the general type of applicant being put forward is much better than was the case previously. This appears to be a work which should be materially increased and should prove greatly to the advantage, not only of Canada and those employers who engage these men on arrival, but especially to the applicant himself. Several very encouraging letters have been received from men who sailed in 1927, after having taken a short course of training under this Scheme.

Bangor—Wales Agency

It is with pleasure that I report, that there has been considerable increase in Emigration from Wales as compared with former years, and I am of opinion that during this year more emigrants went out to Canada than during any year in the history of the Principality. When it is considered that the population of Wales is only slightly over 2,000,000, the emigration on a percentage basis, would be higher than from England, Scotland or Ireland.

This I attribute chiefly to the success of those who went out under the 3,000 Family Settlement Scheme, the total number of families accepted under the Scheme being 120. From reports it would appear that only about 6 per cent failed, and the encouraging letters received from those who have been successful, together with the splendid publicity given by the press to these, brought forward over 200 applications under the Scheme for 1928. If it had been possible to place a further number of families this year, I have no hesitation in stating, that I could easily have selected 180 good families.

During the year I only heard one complaint in respect to families who had gone out. It would therefore appear, that even the small percentage, who did not make good, were able to find some other work in Canada.

The present spring, I regret to report, has shown a marked decrease in the applications received from experienced farm workers. This may be attributed to the following causes:—

(1) Each year shows a decrease in the number of men employed in Agricultural Work in Wales, owing to so much land being under pasture. It is quite evident that fewer men are being employed on the land from year to year. Those unable to find employment on the land have either drifted to other work or emigrated, and the few boys who are started at Agricultural Work, makes it clear that we must anticipate for the future a marked decrease in the number of experienced farm workers.

(2) Those who formerly worked on the land have sought other work, under which they can receive benefit when out of employment through the dole, and this has a tendency to keep men in this country.

(3) The industrial depression has thrown out of employment thousands of men desirous to work, and who would be prepared to take up farm work, were it not that the capital they had, has been exhausted. There are thousands of young men who are not even able to find the £5 or £6 necessary before they can pay their way even under the reduced rate.

(4) In the country districts it has been found that some experienced farm workers are not hurrying to be medically examined, because they are not able to get away from their work on the land during the day, and they are reluctant to ask their employers for time off. A great number of farm workers live a good distance from the Centre where they are to be medically examined, and it means that they have first to get "leave off" their work to go to the nearest town to be photographed and another "leave" to be medically examined and interviewed.

This department was represented at fifteen one-day shows, and at the Royal Welsh Agricultural Show which was held at Swansea for four days. I also assisted at the Royal Show at Newport.

A very large number of inquiries were made, especially at the Royal Welsh Agricultural Show at Swansea. It is very difficult to find out the number of emigrants, who have been first of all stimulated with the idea of emigrating to Canada through these shows. The literature distributed travels far, and it has been found in numerous cases, that the applicants sought their first advice at our Stands, yet not applying definitely until two or three years after the show.

During the month of November and the first two weeks in December (1927) thirty lectures were delivered, and I had arranged them in some of the large centres, so as to give an opportunity in every county for those interested to attend. The lectures were well attended, in many places, the doors had to be closed before the lecture commenced and hundreds failed to gain admission.

Glasgow Agency

The 3,000 Family Scheme is now attracting the attention of even a better class of agricultural worker than it has in the past. The scheme is becoming better known. In many cases a farm worker has gone out to Canada under the scheme, and, according to his reports sent back, has made much better progress than his old country employer at home during the same period. This statement has been made to me by farmers in this country, and has been responsible for several real good farmers selling up here and going out under the scheme this year. There is no doubt but that the standard, or quality, of the families going out this year is higher than in previous years.

Experienced single men are becoming very scarce and hard to get. The agricultural areas of Scotland have been very thoroughly combed. In many cases the good single man in this country can secure as high wages here as in Canada. Of the inexperienced men there is no scarcity but the majority of these would never make farmers.

The Boy Scheme is, I believe, one that will stand more development, and offers the most helpful migration in years to come. Scores of boys leaving the schools have no hope of employment. The Boy Scheme, if handled direct by the Government, and developed, should call forth ready response. I believe, in the Scottish area.

The Women's Department continues to flourish. There never seems to be any scarcity of domestics in Scotland. It always seems to me that the women in this country are more ambitious than the men.

Inverness Agency

Callers at the office, 2,697.

Callers show an increase of 524 over last year. On account of the scattered area and the inadequate transportation facilities, the majority of interviews still continue to be held outside of Inverness. It is impossible for even single applicants from any distance to come to the office.

Publicity and Propaganda.—Publicity and propaganda work were carried out through the following channels:—

(1) Standard advertisements inserted in local newspapers through London office.

(2) Publication in local newspapers (at the request of the agent) of letters received by the agent from families, single men and domestic workers who went out under the Empire Settlement Scheme during 1927-28.

(3) Publication and circularization of copy letters (in leaflet form) received by agents from families, single men and domestic workers who went to Canada under the Empire Settlement Scheme during 1927-28. (A sample letter is attached.)

(4) Circularization, by leaflets and literature of married and single agricultural workers in the principal agricultural districts in the area, names and addresses being obtained from the voters' rolls.

(5) Lectures.

(6) Advertised interviews.

(7) Distribution of posters to outlying districts.

(8) Distribution of calendars, atlases and wall maps to schools, clubs, shops and private individuals in country districts.

(9) Distribution of peonies.

(10) Co-operation with shipping agents.

Adverse Propaganda.—The anti-emigration feeling amongst employers in this Area is very strong, due to the best of the agricultural population leaving. A Land Settlement official who was attached to this office for some three months this year, remarked on the evident unpopularity of the emigration schemes.

It is difficult to ascertain all the reasons for the antagonistic attitude amongst employers and the general public to emigration schemes, but several of the obvious causes have been dealt with under the heading "Empire Settlement Act".

It is considered that too many organizations are dealing with publicity work and interviews.

Under the present system, applicants require, in many cases, to attend twice for interview, once with the transportation company representative and again with the government agent, with, of course, the medical examination following. In addition, they receive correspondence from the transportation company's representative, then from the shipping agent and, finally, from the Government office. The applicants get confused and they feel they are being sought after too eagerly. The uneducated mind cannot realize that all this propaganda work and expense may be worth while to the British and Canadian Governments. They judge only the obvious, with the result that all over the country there is a growing suspicion against Canada and her schemes.

The fact that shipping agents are receiving commission on bookings is also a cause of suspicion. The public does not distinguish between a shipping agent and a Government agent, and there is the general idea that everyone connected with emigration is interested from a financial point of view, in the number of applicants who proceed. One satisfied settler wrote:—

DEAR MISS MACDONALD,—I now take the liberty of writing you these few lines to let you know how we are getting on in Alberta. It certainly is a splendid country. My husband and I like it very well. We would never dream of going back to live in Scotland again. We would not mind it for a holiday. It's getting on for three years since we came out here.

Our destination was supposed to be Edmonton, but we were taken off at Hardisty and put on a farm five miles from town. My husband worked for a farmer there. Then we were moved up here on the 3rd of April last year, and doing very well. There were just thirty acres of land broken, but we broke twenty-nine acres last year and twenty this year, so we are getting quite a nice farm. I am milking seven cows, feeding six calves, and I am feeding twenty pigs, so I have my work cut out for me.

We have lovely heavy crops this year, and I have a splendid garden of all kinds of vegetables. I am very busy just now packing Saskatoon berries for winter.

I have a sister-in-law that would like very much to come out next month, so I would be very much obliged to you if you would communicate with her and see how much her fare would cost.

There is a place near us that is waiting for her, so if she hasn't enough money could you, through any of your organizations, advance her a little? We could pay it back in the fall, or she could do it herself. Her address is Miss..., Newtonmore, Invernessshire.

MRS. JOHN DUNBAR.

DUBLIN AGENCY

Conditions in the Irish Free State are similar to those obtaining in the previous year, consequently there was little change in the nature of our work. Active propaganda being inadvisable, the office continued to be an Information Bureau. In the main we confined our efforts to giving reliable information and advice to voluntary enquirers, interviewing prospective emigrants, and furnishing with Directional Certificates suitable agriculturists. On the whole we secured a fair amount of publicity by the judicious distribution of the literature specially compiled for use in the Irish Free State. When interviewing and writing to prospective emigrants we suggest that their friends may secure literature and information concerning the Dominion by applying to the office; when a schoolteacher applies for a Wall Map of the Dominion we also send a few copies of the Atlas.

When interviewing applicants about the country we ask for character reference purposes, the name of his or her clergyman, and make a point of calling upon him, thus effecting the acquaintance of the local parish priest or curate. We keep in close personal touch with the bulk of shipping agents, of whom there are about 400, calling on them on every possible occasion, discussing Canada, keeping alive their interest and eliciting their co-operation in encouraging desirable settlers to locate in the Dominion. The constant supply of press notices, bulletins, periodicals, etc., being received are passed on to the press, agricultural colleges, libraries, etc. Some of the most influential of the Irish daily newspapers are decidedly friendly in their attitude to Canadian affairs and in almost every edition publish articles and paragraphs of Canadian interest. One journal in particular is most outspoken in its advocacy of emigration to Canada. Recently in an editorial this paper pointed out that most Irish emigrants go to the overcrowded urban life of the United States there to take up low-grade, unskilled occupations, and it declared that "it would be better for themselves and for Ireland if these emigrants carried their sturdy energies to the farms of Canada where they might win their own farms and found happy and healthy families."

Belfast Agency

A very great interest has been manifested in our Dominion during the fiscal year just closed. This interest is clearly shown by the very increased number of inquiries received from those residing in Northern Ireland and by the splendid attendance at the various lectures given in this district. The Government exhibits at the various agricultural and horticultural shows where the department was represented were also well patronized.

There has been an exceptionally fine type of men, women and children leaving these shores within the last twelve months who hope to make their homes in our Dominion, and it is gratifying to note that the majority of these are experienced agricultural families, farm workers and household workers.

Continental Europe

Inspectional offices on the Continent are established at Paris, Antwerp, Rotterdam, Hamburg, Danzig and Riga. The Canadian officers in charge at these places are men trained in inspectional work and having a knowledge of two or more languages. The inspection though not final, has to do with the ability of immigrants to comply with the immigration regulations applicable in each case and the general fitness of immigrants for work in Canada. Those who pass primary inspection are given an examination visé which is placed on the passport.

The number of visés granted during the fiscal year is as follows:—

Antwerp	12,694
Paris	10,342
Rotterdam	3,059
Hamburg	8,590
Danzig	18,110
Riga	2,219

The number of visés does not always show the number of persons concerned because a whole family may be included in one passport.

Upwards of 300 agricultural families, having a capital of $1,000 or more secured visé for Canada during the year, the total declared capital in possession of these families being $878,351.

STATEMENT of Primary Civil Inspection showing passports viséd, rejections, appeals, and causes of rejections, etc.

Office	Admissions	Rejections	Appeals			Causes of Rejection							Letters in	Letters out	Interviews
			Sust.	Dism.	Pend.	PC. 182	PC. 183	PC. 185	Sec. 3 b.	Sec. 3 c.	SS. j.	SS. t.			
Antwerp	12,694	649	83	137	82	4	311	82	88	71	53	70	10,179	17,760	6,519
Paris	10,444	777	25	136	95	28	491	321	55	60	52	28	5,460	6,205	6,065
Rotterdam	3,059	204	26	70	24	.....	82	46	14	49	1	2	4,500	4,689	3,982
Hamburg	8,590	514	112	138	98	.....	115	38	24	205	15	11	4,264	5,435	2,547
Danzig	18,110	462	138	219	123	.....	179	21	52	117	13	3	3,909	6,099	2,611
Riga	2,219	191	55	36	38	1	115	12	7	20	11	12	3,194	3,567	653
Total	55,116	2,797	439	736	460	33	1,293	520	240	522	145	126	31,506	43,755	22,377

NOTE.—Some aliens were rejected on account of more than one statutory cause, consequently the number of rejections will not correspond with the causes of rejections, e.g. one alien may have been rejected upon two grounds, e.g., P.C. 182 and P.C. 183.

REPORT OF THE DIRECTOR OF PUBLICITY, ROBERT J. C. STEAD

Publicity activities designed to secure for Canada a movement of desirable settlers were conducted on a considerable scale during the fiscal year under review. These activities were centralized mainly in the British Isles and the United States. Publicity in the United States is handled directly from the Publicity Branch of the Department of Immigration and Colonization, but publicity operations in Great Britain are under the supervision of the Director of European Emigration in London, acting, of course, in close co-operation with headquarters at Ottawa.

ADVERTISING

Among the mediums used to make known the opportunities for agricultural settlement in Canada are the agricultural papers and other publications having an extensive rural circulation among the classes whom it is sought to interest. In the British Isles the advertising, in addition to being directed toward prospective farmers and farm labourers, includes domestic servants in its appeal. In the United States it is limited strictly to those who wish to seek their fortune on the land.

Advertising in the British Isles is begun in the late autumn and continued through the winter months until April. This is the season in which most prospective settlers are giving consideration to the possibility of moving to Canada. The purpose of the advertising is not only to present information concerning Canadian opportunities, but to draw inquiries from those interested so that the information may be supplemented by personal contact with a representative of the department. Advertising in the British Isles is placed through an advertising agency in London.

Advertising in the United States is placed with the leading national farm papers, with state farm papers in localities where best results can be expected, and, to a limited degree, in papers published in the languages of the countries of Northern Europe, mainly Scandinavian. It is handled through an advertising agency located in Canada and selected for the purpose upon evidence of its ability to handle the advertising of the department in the United States to advantage.

The advertising of the department in the United States is designed primarily to bring the prospective settler into contact with the representative of the department. It is no part of the theory of the Publicity Branch that settlers in any great number can be moved from one country to another exclusively by advertising. The function of advertising is to give information about and create interest in settlement opportunities in Canada. When this interest leads the prospective settler to write a letter of inquiry or fill out a coupon and send it to the nearest Canadian Government agency the advertising has done its job. The value of the department's advertising can therefore be reckoned in general terms, although, of course, not exactly, in the number of inquiries produced in any territory or through any medium. These results are carefully checked and changes are continually being made in our advertising list, papers being dropped which are found to be too expensive in proportion to returns and others added which give promise of satisfactory results.

In addition to 26,137 inquiries received direct by our agencies in the United States, 2,002 inquiries from United States points were received direct at Ottawa during the fiscal year 1927-28. These latter inquiries, after being answered, were sent to the agencies in the United States covering the territory in which they originated. The total inquiries received from the United States were 28,139 during 1927-28 compared with 17,888 the previous year—an increase of 10,251, or approximately 57 per cent.

Aside from inquiries originating in the United States and the British Isles, a number from other countries reach the Publicity office each year. In the year 1926-27 these totalled 212 and in 1927-28, 284.

Inquiries arising from advertising in the British Isles go direct to the offices of the department in that country, and are not tabulated in this report.

Booklets and Publications

The production of booklets and other publications designed to make Canada better known in the lands from which immigration is invited, and to give the prospective settler dependable information concerning the opportunities and conditions he will find in this country, is an important phase of our publicity work and occupies a large proportion of the time of the branch. It is not possible in an annual report to state exactly what booklets are compiled and produced in any fiscal year, as the work goes on continually and booklets compiled in one year may be printed and distributed in the next. However, the summary hereunder will give a general outline of the activities of the branch in that connection during the period under review.

A booklet to which very wide distribution is given is called " Canada West ". As its name suggests, it deals with the western provinces of Canada—Manitoba, Saskatchewan, Alberta, and British Columbia. It contains maps of each province and text and illustrations giving information particularly along the line of agricultural opportunities. This booklet is printed in three editions: one designed for distribution in Great Britain, one for the United States, and one printed in French, used mainly for repatriation purposes in French-speaking communities in the New England States. New British and United States editions were compiled, but the printing was not completed during the year. A sufficient number of the French edition were on hand so that no reprinting was required. The " Eastern Canada " booklet deals with the eastern provinces in much the same way as " Canada West " does with those lying west of the Great Lakes. It, too, is issued in three editions—British, United States, and French. Orders for British and United States editions were placed during the year but were not completed. The French edition on hand was sufficient to supply the year's requirements.

The "Descriptive Atlas of Canada" is a publication widely used for educational work in Great Britain and the United States. It is prepared in the style of a school geography and has drawn many favourable references from educationists and from the press. Perhaps one such quotation—from the New York *Sun*—may be permitted:—

"The Canadian Government Information Bureau in Ottawa has issued, for free distribution to teachers and others interested in the study of our northern neighbour, an eighty-page 'Descriptive Atlas of Canada'. In the excellence of its maps it might well be a model for some of our States that yearn to spread their attractions before the public."

A British edition of the Descriptive Atlas consisting of 103,500 copies was compiled and printed during the year. A United States edition of the same size was also compiled and placed in the printer's hands, but delivery was not made until April, 1928. The Atlas is also produced in French but no reprinting in this language was required.

A calendar featuring the possibilities of boy settlement in Canada was also produced for distribution in the British Isles. The quantity printed was 64,800.

The booklet "Farm Opportunities in Canada" features the opportunities for farm settlement in all of the provinces. It is compact and informative, and is produced in several editions, for which there is a continuous demand. During the fiscal year 201,050 were produced for distribution in Great Britain and Northern Ireland, 10,000 for the Irish Free State, and 212,655 for use in the United States.

The "Houseworker in Canada" booklet is designed to give information to women and girls in the British Isles desiring household employment in the Dominion. An edition of 50,620 copies was printed for that purpose.

"Canada—Where to Go for Advice" is a compilation of names and addresses of Dominion and provincial Government representatives in all parts of Canada to whom the new settler can turn for authoritative advice. An edition of 20,200 copies was printed.

The "Map Folder of the World" is a folder with a map of the world on one side showing the commanding position Canada occupies geographically and on the reverse are illustrations and text giving general information concerning this country. Two editions were compiled and printed during the year: 108,300 copies for use in the British Isles and 90,450 copies for use in the United States.

"On the Doorstep of Prosperity in Western Canada" is a special booklet depicting the successes of actual British settlers in Western Canada. Of this booklet 104,000 copies were printed for distribution in Great Britain.

"Canada and Immigration" is a booklet outlining the policy and practices of the Department of Immigration and Colonization. It has been found very useful in giving an outline of the Canadian immigration activities to students, journalists and others particularly interested in the subject. Three thousand copies were printed.

A highly favourable review of the outlook in Canada originally published in a United States paper was reprinted under the title "A Workshop of the World", and 25,000 copies were distributed in the United States.

The department co-operated with the Department of Trade and Commerce by bearing the cost of producing 60,000 copies of a booklet entitled "Sixty Years of Canadian Progress", compiled in connection with the Sixtieth Anniversary of Confederation.

The vest-pocket booklet, which contains in compact form questions and answers concerning Canada, and also a small but up-to-date map of the Dominion, was issued in two editions; for distribution in the British Isles, 97,975 copies, and for distribution in the United States, 99,440 copies.

The department also issued through its Publicity Branch a weekly news bulletin entitled "Canada Week by Week", which is devoted to development information relating mainly to agricultural activities. It has a considerable mailing list reaching newspapers and other news-distributing agencies. During the year issues were published representing a total of 71,225 copies.

News and Feature Articles

The Publicity Branch of the department conducts a news, feature articles, and photographic service on which heavy demands are made by newspapers, magazines and other publicity organizations. This phase of the work is conducted under the name of the Canadian Government Information Bureau. Material is supplied to an associated organization in the British Isles from which it is fed out to the British press, and for which a circulation of 303,000,000 was established by clippings on file. The press of the United States was also reached through an associated organization in that country to a circulation of over 112,740,000, and direct from the office at Ottawa to a circulation of over 89,000,000. Undoubtedly there was also a large circulation for which no clippings came to the attention of the Publicity Branch. Provision is made for translating and distributing Canadian publicity matter in the Norwegian, Swedish and German languages, and a large amount of information dealing particularly with Canadian agricultural development has been published in papers of these languages, mainly in the United States. Photographs to the number of upwards of 2,750 were obtained and circulated.

General

The publicity work of the department has many ramifications, some of which may not appear at first glance to have any direct connection with immigration. But the principle is accepted that whatever makes Canada better known in other countries, particularly in the British Isles and the United States, has a direct effect in stimulating migration to this country. For that reason the branch gladly co-operates in movements and undertakings which are likely to afford a good peg for Canadian publicity abroad.

A case in point is the World's Poultry Congress held in Ottawa in the summer of 1927. The Director of Publicity was honoured by being asked to take the chairmanship of the Special Publicity Committee organized to promote the World's Poultry Congress, and a great deal of work was done along that line. The congress was unanimously pronounced a great success and publicity for Canada was as a result carried into many lands. This department, in co-operation with the Department of Agriculture and the Canadian railways, was able to arrange for a trip by special train from Ottawa to Halifax, from Halifax to Vancouver, by steamer to Victoria, and returning to Toronto, of a party of selected delegates representing seventeen different countries. These delegates included a number of newspapermen from the United States, Great Britain, and elsewhere, and a vast amount of publicity appeared in the publications with which they are connected which is not included in the publicity statement in the previous section of this report. The practice is also followed of encouraging individual journalists, more particularly those connected with the agricultural press, to visit Canada and write up their impressions for themselves. Invariably it has been found that these impressions are of an optimistic nature and are given wide circulation.

REPORT OF SUPERVISOR OF WOMEN'S BRANCH, MISS M. V. BURNHAM

The Women's Branch of the department was formed in 1919, in order that special care might be given to unaccompanied women coming to Canada from the British Isles.

The report for this Branch for the fiscal year ended March 31, 1928, continues to show an increase in the work both in the British Isles and in Canada.

The headquarters of the branch are in Ottawa, where there is a supervisor and staff. Canadian woman officers are employed at the agencies in Great Britain. Woman officers and conductresses for the trains are stationed at the ports of arrival in Canada, and woman officers are employed at Montreal, Toronto and Winnipeg, to give supervision and assistance to women who settle in these districts.

In Great Britain

In Great Britain, there are eight Canadian woman officers who interview intending women settlers and to give them whatever information and advice may be necessary. During the past nine years many women have been prevented from coming out to unsatisfactory settlement conditions.

Under the Empire Settlement Scheme (see Commissioner of Colonization report) British houseworkers are given the reduced passage rate. During the past fiscal year, 4,220 passage warrants were issued. There is an increasing shortage of experienced domestics in the British Isles available for migration and many young women with very limited household experience are accepted, provided they are of good character, adaptable and willing to learn.

The following extract from the Empire Settlement Passage Agreement indicates the obligations assumed by the department for houseworkers:—

"Take the necessary steps for the recruitment and selection of migrants and recommending the assistance to be granted under this agreement.

"Make adequate arrangements for household workers to be personally conducted on outgoing vessels to be met by Women Officers of the Dominion Government and to be under governmental care and supervision until suitable situations are found for them and for as long afterwards as aftercare may be necessary.

"Guarantee work for the household workers at standard wages."

Steamship Conductresses

The Canadian and British steamship lines co-operate with the department in looking after unaccompanied women and in giving general supervision on the journey between Great Britain and Canada. These companies employ conductresses on their vessels, to look after the welfare of girls and women travelling unaccompanied.

In Canada

A woman officer meets every ship that lands at Quebec, Halifax and St. John. She confers with the steamship conductress and ascertains from her the names of those requiring assistance. The steamship conductress assists the woman officer during the time that the passengers are passing through inspection.

The Canadian woman officer makes arrangements with the railroad companies for special cars for unaccompanied women, and assigns to the train conductresses their work. The following table has been compiled from the list of unaccompanied women and gives some idea of the work done.

—	Ships met	Conducted Parties	Special cars arranged for	Unaccompanied women and Children		Children travelling alone
				British	Foreign	
Quebec	166	229	199	10,292	6,182	357
St. John	32	39	19	1,151	1,331	19
Halifax	186	106	53	821	6,090	56
	384	374	271	12,264	13,603	432

Immigration Conductresses

The train conductresses have their headquarters at the ports and are under the immediate direction of the woman officer at the port. Their duties are to help women and children at the port, to co-operate with the train officials in loading the trains, and to travel with the train in care of the unaccompanied women and children as far as it is deemed necessary. They are required to keep a watchful eye over the girls, to help the tired mothers, to give first aid to the sick and to look after the general welfare of travellers. Many of the conductresses are trained nurses. In addition to the unaccompanied women there are often women and children who need the help of the conductress although the husband may be travelling with them. Owing to the distances in Canada the train journey is a long one, and newly arrived settlers, through sheer fatigue, sometimes become discouraged. At this point the conductress, by tactful advice, can be of great help.

Since the spring of 1926 each conductress has been equipped with a large tea kettle for use on the stoves on the colonist cars in order that there may be boiling water always ready to make tea en route and for the babies' bottles. Enthusiastic reports are still being received about the tea kettles.

The following extracts from conductresses' reports give an idea of the work being done:—

"This woman destined to her husband was really pathetic. She carried an infant and a baby and the other five were all ages under eleven years. They were good, obedient and helpful children, but Mrs. ——— had been ill and was nervous and trembling constantly. The Red Cross nurse at the port gave her to me as a special charge and I am thankful to say she arrived at her destination in better health and heart than when she landed. A wire was sent to her husband. She was so grateful for all that was done."

"This woman complained of feeling very miserable, bones aching and headache. I gave her ——— and the doctor saw her at Parent, Cochrane and Sioux Lookout. He said to continue what I was doing. She had a temperature around 102 degrees most of the time, but just before arrival at Winnipeg it came down to 99 degrees."

"Small boy, aged 4½ years, a Finlander, fell against the sharp corner of an extended seat and cut his forehead. The wound was about one inch long and deep with jagged edges, and bleeding profusely. A dressing of iodine was applied, and later the edges of the wound were brought together and strapped; the cut was quite clean."

The following is from a grateful houseworker to the conductress:—

"My dear friend: I am getting on fine now but I always claim you did most as your strength and kindness served to give me courage and spirit to fight my pain on the train. You were a mother to me and I will never forget you . . . ."

Another letter read as follows:—

". . . . I must admit it is a great change to what I have been used to and I felt it awful lonely at first. You see I come from the city of Glasgow, Scotland, so you cannot blame me, but I am quite used to it now, only sometimes I feel a bit lonely; of course that is natural. . . . Well you did look after all the girls well and I may tell you that they all thought the world of you . . . ."

The foreign unaccompanied girls have given a good deal of trouble during the past year. As stated in a previous report many have endeavoured to leave

the trains en route and the conductress is forced to be on the alert at every station in order that the so-called friends and relatives may not persuade the girls to leave the train instead of proceeding to their original destinations.

Extract from report illustrating assistance given to foreign girls:—

"This girl was ill, I think from fright over the fact that she had to leave her friends and could not speak English. I got her to eat and sleep and when she found she was safe, was quite all right."

STATEMENT of Houseworkers, by Origins, arriving at Ocean Ports, for the Fiscal Year ended March 31, 1928

Albanian	5	Lithuanian	201
Arabian	1	Magyar	212
Armenian	4	Maltese	3
Austrian	50	Moravian	3
Belgian	58	Negro	67
Bohemian	2	Persian	2
British—		Polish	745
English	2,859	Portuguese	2
Irish	1,443	Roumanian	20
Scotch	2,664	Russian	95
Welsh	153	Ruthenian	1,404
Bulgarian	9	Scandinavian—	
Croatian	17	Danish	266
Czech	54	Icelandic	5
Dutch	85	Norwegian	327
Esthonian	26	Swedish	289
Finnish	1,279	Serbian	14
French	47	Slovak	144
German	1,142	Spanish	1
Greek	65	Swiss	56
Hebrew	691	Syrian	11
Italian	210	Turkish	1
Japanese	6		
Jugo-Slav	42	Total	14,798
Lettish	18		

FOREIGN DOMESTICS

The foreign women listed in table above were destined either to husbands, relatives, or to be placed in domestic work. These women were given special care on the trains by the conductresses.

This branch has secured reports on 3,266 foreign domestics and 67 per cent satisfactory replies were received.

Under the railroad agreement, 2,532 foreign domestics arrived during the calendar year of 1927. In the east they came to fill definite situations with employers whose applications had been approved. In the west those seeking employment were required to report to our Division Commissioner in Winnipeg and to be placed under his supervision.

CANADIAN RED CROSS SOCIETY

The statistics hereunder are supplied the Canadian Red Cross Society, and give an excellent idea of the work done by this society in the Red Cross Nurseries at the ocean ports of Quebec, Halifax and St. John.

Nursery	Ships	Infants and Children	Women	Treatments	Follow-up Cards
Halifax	201	4,870	8,277	262	863
Quebec	165	11,310	6,567	175	3,462
St. John	30	2,128	1,548	99	245
Total	396	18,308	16,392	536	4,570

The nurseries are in charge of a trained nurse, and expert assistance is given to the women who bring their babies and small children to rest, pending the departure of the trains. The women are then able to get their baggage checked, secure food for the journey and attend to other important matters.

The nurse advises the train conductress of any case needing special care en route.

The nurseries are most hospitable centres, and tea, milk and biscuits are given to the weary travellers. The equipment and space are provided by the Department of Immigration but, as stated in previous reports, the credit of the work is due entirely to the Red Cross Society and words of appreciation are heard on all sides from newly arrived settlers. British and foreign both receive care and attention in the nurseries.

United Services Fund

The supervisor is the representative in Canada to administer this fund for the assistance of ex-service women now living in Canada who were members of the Women's Army Auxiliary Corps, Women's Royal Air Force, Women's Royal Navy Service and Queen Mary's Army Auxiliary Corps. During the past year assistance has been given in nine cases.

The Ex-Service Women's Clubs in Montreal and Toronto are well attended and are doing good work to cheer and assist members who are in ill-health or who otherwise have fallen into difficulties.

The supervisor, in November 1927, called at the office of the United Services Fund in London, England, and expressed her appreciation to the committee who kept her supplied with funds to give assistance when required. The supervisor was fortunate enough to be in London for the annual dinner of the Women's Army Auxiliary Corps, which was presided over by the Adjutant-General of the War Office. About six hundred members of this corps came from all over the British Isles to attend this dinner.

Travellers' Aid

The Travellers' Aid workers are to be found at all the important stations in Canada to assist the travelling public. Numerous wires are sent them by our conductresses asking for special assistance in individual cases. This is one more important link in this country which makes it possible to give adequate after-care.

Empire Settlement Scheme

The Empire Settlement Agreement came into force in the spring of 1923. The first houseworkers were given passage loans to cover the fare from port of embarkation in the British Isles to the rail destination in Canada. On January 1, 1926, a new agreement was entered into and the special rate came into effect, particulars of which will be found in the report of the Commissioner of Colonization. Since that date the houseworker has not been required to refund any large loan.

The following table gives the number of houseworkers assisted under this agreement during the past fiscal year:—

Provinces	Accommodated at Hostels	Coming through Nominations	Total
Nova Scotia	20	22	42
New Brunswick	7	11	18
Prince Edward Island	.....	2	2
Quebec	477	113	590
Ontario	1,262	519	1,781
Manitoba	115	84	199
Saskatchewan	184	177	361
Alberta	210	116	326
British Columbia	81	123	204
	2,356	1,167	3,523

In addition to the above, the Ontario Government brought out under the agreement 312 and the Salvation Army 341 houseworkers.

All these women have been met on arrival by women officers and arrangements have been made for their safe journey to destinations. At the various hostels they have been given a warm welcome and twenty-four to forty-eight hours' free accommodation.

Nominations

With reference to the 1,167 nominations, above listed, the houseworkers who came out to fill these situations did not pass through the hostels but the home conditions were all carefully looked into by the department before the nominations were approved. Under the terms of the Empire Settlement Agreement all houseworkers receiving passage assistance are under the general supervision of the department and receive aftercare. Every year this number increases and the aftercare assumed by the department has become a heavy item.

To illustrate the work involved in aftercare the reports from our women officers in Montreal and Toronto are of interest. Two women officers are employed in Montreal and two in Toronto with a third for emergency work when required.

Montreal		Toronto	
Interviews	1,207	Interviews	4,718
Letters sent	4,344	Letters received	8,240
Investigations	526	Letters sent	9,230
Telegrams received	478	Investigations	3,002
Trains met	417		
Boats met	118		
Detentions met	144		

Canadian Women's Hostels

The Canadian Women's Hostels have been established in provinces to which houseworkers seeking domestic employment are destined. These hostels are all non-denominational and are supported by grants from the Dominion and provincial Governments. In addition, the Dominion Government gives twenty-four to forty-eight hours' free accommodation to houseworkers on arrival in order that they may get rested before starting to work. The hostels are situated in the following centres: Halifax, Montreal, Toronto, Winnipeg, Regina, Calgary and Vancouver. They are all managed by local committees and monthly reports covering the work done are sent to the supervisor at Ottawa. The work in each hostel varies according to local conditions.

In Montreal the conductresses take parties of girls to the hostel when they have to wait for train connections, and according to reports 722 of these tran-

sients have been accommodated. They arrived there at all hours of the day and night. In Montreal, the hostel has an Employment Bureau and placed 864 girls during the year.

On account of the number of houseworkers who go to Toronto the hostel there is a very busy centre. The superintendent gives a talk to each group of girls before they go to the Employment Service to be placed in situations. In this talk the superintendent explains what work is available, rates of wages, local conditions, rules of the hostel, etc. The girls are also told what they should specially guard against and how they should look after their health. The talks occupy about twenty minutes and it is found that they are given just at the right time, because it is at this point that the girl feels rather at a loss, owing to the fact that she has received so much advice from strangers on the way out on the boat. Talks given to the girls individually were found to be not nearly as effectual as the short addresses to groups.

During the past year 1,319 houseworkers registered at the Toronto Hostel as newly arrivals and reported to the Employment Service for placement.

In Winnipeg, which is another divisional point, the hostel looks after a certain number of girls who are on their way farther West, during the time they are awaiting train connections.

The Regina Hostel continues to do good work, and the girls are always given a warm welcome on arrival.

At Calgary, the superintendent receives Empire Settlement families, in addition to houseworkers; a certain number of foreign domestics have also been accommodated at this hostel. The figures are as follows:—

British houseworkers	203
Empire Settlement families	82
Children of Empire Settlement families	296
Foreign domestics	72

The department has made arrangements with the following organizations to receive houseworkers and grants an allowance of twenty-four to forty-eight hours' free accommodation:—

Sisters of Service Hostel, Halifax.
Rosary Hall Hostel, St. John.
Y.W.C.A., St. John.
Catholic Women's League Hostel, Montreal.
Y.W.C.A., Ottawa.
King's Daughters Guild, Ottawa.
Rosary Hall Hostel, Ottawa.
Catholic Women's League Hostel, Toronto.
Y.W.C.A., London.
Y.W.C.A., Hamilton.
Catholic Women's League Hostel, Winnipeg.
Y.W.C.A., Edmonton.
Rosary Hall, Edmonton.
Y.W.C.A., Vancouver.
Queen Mary's Coronation Hostel, Vancouver.
Y.W.C.A., Victoria.
Joyce Hostel, Kelowna, B.C.

A total number of 2,668 girls have received accommodation on arrival at the Canadian women's hostels and institutions above mentioned.

The department during the past year has given the per diem allowance to the Salvation Army hostels, where houseworkers are accommodated on the same basis as other organizations listed above. Twenty-four hours' free accommo-

dation to houseworkers is given in hostels east of Winnipeg, this being extended to forty-eight hours if the girl arrives on a Saturday; Winnipeg and west, forty-eight hours' free accommodation is considered necessary to enable the girls to get rested and to get placed in situations.

Employment Service

The Employment Service in Canada has always co-operated very fully with the Women's Branch and has furnished statistics and reports as required. Domestics arriving at the hostels to be placed in situations are found work in the following provinces by the Employment Service: Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia. In a few centres the placement is done by one of the department's representatives instead of the Employment Service.

The confidential references of houseworkers are all sent direct from Ottawa to the various Employment Bureaux, and when the girl registers the bureau already has her record and is able to place intelligently.

Co-operation with the Department of Health

As in previous years, this branch forwards to Dr. MacMurchy, Chief of the Division of Child Welfare, Department of Health, the names of all women who come to this country to be married. Last year 490 young women coming out as new settlers, far from friends and relatives, were put in touch with Dr. MacMurchy, and the many letters of appreciation which she receives show the necessity and value of this piece of work.

The Society for the Oversea Settlement of British Women

The Society for the Oversea Settlement of British Women, which is the Women's Branch of the Oversea Settlement Department, is in close touch with the Women's Branch of the Department of Immigration.

During the fiscal year 1927-28 the Women's Branch investigated settlement arrangements in connection with 207 applications made to the society for passage assistance. These investigations were carried on in some cases by the agents of the department throughout Canada, and in outlying districts by correspondence. In all cases where loans were granted the loan forms were completed under the direction of our officers. Two hundred and four women and 527 children are included in these 207 applications. Of this number, 77 women and 197 children (in all 274 persons) arrived in Canada in 1927-28, in most cases to join the husband and father, and a total of £2,725 was spent by the S.O.S.B.W. for their passage. In addition, grants were secured from various societies and funds in Great Britain to augment the amounts loaned. The sum of £2,725 is expected to be repaid by the families, in monthly instalments.

The S.O.S.B.W. arranged seven parties during the past year which were specially conducted. On arrival, the Women's Branch gave the necessary care and reported back to the S.O.S.B.W. on the various individuals helped.

In November, 1927, the supervisor while in London conferred with the S.O.S.B.W. on matters affecting the immigration of British women to Canada. The general consensus of opinion was that there is a great shortage of experienced domestics in the British Isles, and that to meet the demand in the Dominion it would be necessary to draw from the inexperienced class, which includes girls who are in other employment, such as clerical, industrial, etc. At the present time these girls are not generally accepted unless nominated for definite situations. There is keen competition in recruiting for domestics in the British Isles: Australia and New Zealand are both in the field. Australia offers a free

passage, and New Zealand a free passage plus £2 pocket money. In addition, a training hostel has been established under the direction of the British and Australian Governments to train inexperienced girls.

A free training scheme for nursery nurses under the auspices of the Sick Children's Hospital, in Toronto, was discussed; twenty-four girls are required each year and are given one-year's free training; at the end of that time they will be placed as experienced nursery nurses at a minimum wage of $38 a month. The S.O.S.B.W. were asked to make the selection and considered that they would be able to find suitable applicants.

The supervisor wishes to record her appreciation of the cordial reception given her and the official luncheon in her honour as head of the Women's Branch given by the Council and Executive Committee of the S.O.S.B.W.

Canadian Council of Immigration of Women

In February, 1928, the Canadian Council of Immigration of Women held a conference in Ottawa at the department. The following organizations are members of this council:—

Canadian Council of Agriculture.
Canadian Council on Child Welfare.
Canadian National Committee on Mental Hygiene.
Canadian Red Cross Society.
Canadian Legion of the British Empire Service League.
Federated Women's Institutes of Canada.
Catholic Women's League of Canada.
Imperial Order Daughters of the Empire.
National Council of Women.
Social Service Council of Canada.
Trades and Labour Congress of Canada.
Women's Auxiliary to the Missionary Society of the Church of England.
Women's Christian Temperance Union.
Women's Missionary Society of the United Church of Canada.
Women's Missionary Society of the Presbyterian Church in Canada.
Young Women's Christian Association.

The provinces were all invited to send delegates, but the only provinces officially represented at this meeting were Nova Scotia, Ontario, Manitoba and Alberta.

Reports were given by all the organizations present of the work done by them. At the conclusion of the proceedings, certain recommendations were formulated for submission to the organizations having membership in the council for their discussion and approval. A complete report of the proceedings has already been published.

Appreciation of the Work Done by the Welfare Agencies

It is impossible in this report to record all that is done by the various organizations in Canada interested in immigration. Social service work is well organized in the Dominion and the department receives the co-operation of the Social Service Departments of hospitals, municipalities and welfare organizations in assisting and giving supervision to girls who are in difficulties.

During the past year, the supervisor visited the Immigration Offices, Canadian Women's Hostels, Employment Bureaux and Welfare Agencies interested in immigration in the following centres: Quebec, Montreal, Toronto, Winnipeg, Regina, Saskatoon, Edmonton and Calgary. In November, 1927,

the supervisor called at the following offices in the British Isles: London, Liverpool, Glasgow and Belfast. She also attended meetings, gave addresses, and, as already mentioned, was in conference with the S.O.S.B.W. in connection with matters which affected the immigration of British women.

REPORT ON JUVENILE IMMIGRATION

G. Bogue Smart, Supervisor

The British juvenile immigration movement from Great Britain to Canada has a history of sixty years, and it is entitled to recognition as the oldest established branch of Canadian immigration. During the six decades over 87,699 children of Anglo-Saxon origin have been brought to Canada under the auspices of organized societies and accredited agencies.

From its inception and until the year 1923 the movement was assisted and maintained as a philanthropic undertaking, and apart from a small per capita bonus of $2 received from the Canadian Government no aid was received from any source in Canada.

Recent years have witnessed a remarkable change in public opinion in Canada regarding the importance of a steady flow of people from the United Kingdom. This is true particularly with reference to the migration of boys and girls for farm apprenticeship and assistance in household work and the advantages this country offers to young people are now more generally recognized in the motherland than heretofore. This growing consciousness of the immense value of juvenile migration to our vast Dominion and also to Great Britain from a national point of view is but the forerunner of a greater development.

The following organizations (which do not however include purely Provincial Government Schemes), are actively engaged in the work with the approbation of the British Government and the Government of Canada.

Organization	*Headquarters*
Dr. Barnardo's Homes (Boys and Girls)	538 Jarvis street, Toronto, Ont.
The British Immigration and Colonization Association (Boys)	87 Osborne street, Montreal, P.Q.
The Catholic Emigration Association (Boys and Girls)	1153 Wellington street, Ottawa, Ont.
The Church Army (Boys)	56 Smith street, Winnipeg, Man.
The Church of England (Boys)	Sherbrooke, P.Q.
The Church of England (Girls)	661 Huron street, Toronto, Ont.
The Church of England (Council of Empire Settlement) (Boys)	9729-106th street, Edmonton, Alta.
The Church of England (Council of Empire Settlement (Boys)	Melfort, Sask.
The Church of England (Council of Empire Settlement (Boys)	Indian Head, Sask.
Dr. G. C. Cossar (Boys)	Lower Gagetown, N.B.
The Dakeyne Farm (Boys)	Falmouth, N.S.
Mr. J. W. C. Fegan (Boys)	295 George street, Toronto, Ont.
Sir J. T. Middlemore (Boys and Girls)	Fairview Station, Halifax, N.S.
The National Children's Home and Orphanage (Boys)	Main street E., Hamilton, Ont.
Mr. W. Quarrier (Boys and Girls)	Brockville, Ont.
The Salvation Army (Boys and Girls)	1225 University street, Montreal, P.Q.
The United Church of Canada (Boys)	Norval, Ont.

Until the year 1924 the term child was generally used by this branch to mean children under the age of fourteen years, while children between the age of 14 and 18 years were designated as juveniles. Under the British Empire Settlement Act, the word children is now applied to all immigrants up to the age of 17 years, who migrate to Canada under the auspices of recognized child emigration organizations.

The organizations engaged in this branch of emigration in Great Britain have benefited in the promotion and extension of their work by the financial assistance provided under the terms of the Oversea Settlement Agreement which offers free transportation for boys and girls from 14 to 17 years, who migrate to Canada under the auspices of approved societies and who respectively come to the Dominion to work on the land as farm workers and apprentices and in domestic service.

The arrivals during the past fiscal year were 1,866 boys and 204 girls respectively—an increase in point of numbers over the preceding year.

On their arrival the children are immediately conducted to the headquarters of the society and in due course sent to homes and situations selected for them.

For many years the demand for juveniles of this type has been so great that in placing these young people it has become merely a matter of selecting the most advantageous home for the boy or girl. The steady demand which came from every province of the Dominion was greatly in excess of the number of boys and girls available.

The number of children and juveniles migrated to Canada by the principal organizations in Great Britain during the past twenty-six years, and the number of applications annually received at the Receiving and Distributing centres in the same period were as follows:—

Fiscal Year	Children emigrated	Fiscal Year	Children emigrated
1900–1	977	1914–15	1,799
1901–2	1,540	1915–16	821
1902–3	1,979	1916–17	251
1903–4	2,213	1917–18	.....
1904–5	2,808	1918–19	.....
1905–6	3,264	1919–20	155
1906–7	1,455	1920–21	1,426
1907–8	2,375	1921–22	1,211
1908–9	2,424	1922–23	1,184
1909–10	2,422	1923–24	2,080
1910–11	2,524	1924–25	2,000
1911–12	2,689	1925–26	1,862
1912–13	2,642	1926–27	1,741
1913–14	2,318	1927–28	2,070

Receiving and Distributing Homes

There are twenty homes or hostels for the reception and care of the children. These centres are a necessary feature of the work and fulfil the requirements of both the British and the Federal Governments, whose desire is to safeguard the welfare of the children, by providing a home to which they may return in case of illness, changing situations, or for any other reason.

The work calls for a continuous supervision over the children, first by systematic visitation; second, by regular correspondence. Each child is dealt with individually, and made to feel that a personal interest is taken in his welfare.

During the past year, hostels were established by the Church of England, Council of Empire Settlement at Indian Head and Melfort, Sask., and Edmonton, Alta., for the reception and distribution of boys in Western Canada. This organization has migrated and placed with western farmers one hundred and thirty-nine boys.

The United Church of Canada has established a reception and training farm for boys at Norval, Ont., from which they will be distributed amongst the farmers of the province of Ontario.

The Church Army has in operation at Hempstead, Essex, England, a training farm for boys preparatory to their migration to the Dominion. In 1927, one hundred and sixty-four lads passed through this farm of whom seventy-two migrated to Canada and other parts of the Empire.

For many years, the Salvation Army has maintained at their Colony Farm at Hadleigh (Essex), a school for training boys in the rudiments of farm work with a view to their migration to oversea dominions.

Another well equipped, and the first to be established, is the late Mr. J. W. C. Fegan's training farm at Goudhurst, Kent, England. This farm covers about three hundred acres of fine land in one of the most productive districts in Kent. Canadian farming implements and other distinctly Canadian equipment, have been adopted for the benefit of boys who migrate to this Dominion. The boys remain on Mr. Fegan's farm for definite periods before proceeding to Canada, and are taught to handle horses, milk, work a binder and plough. On my last occasion of meeting Mr. Fegan, in speaking of this pre-migration training he said: "With the healthy, open air labour they have here, and the wholesome food, the boys develop rapidly. The elementary training given them in farm work is of great advantage when they go to Canada, and they are well fitted for strenuous work upon their arrival in the Dominion."

It is my privilege to record a satisfactory year's work, the volume of which exceeded the activities of the preceding year. As in previous years, the department continued an annual or more frequent individual inspection of the children. The inspectional staff of this branch includes four men and two women, the latter for girls.

Our inspectors have been engaged the year round travelling in the townships, paying personal and unexpected visits amongst the children. Each child is privately interviewed and a careful survey made of his home surroundings, personal appearance, and general progress. When complaints are received, the child and its employer are brought together with a view of adjusting any minor differences that have been found to exist between them. In the event of a situation being found unsatisfactory to the progress and well-being of the child, full particulars are reported to the superintendent of the home, with a recommendation for such action as circumstances may warrant.

The inspectional work of this branch during the past year, clearly indicates that the boys and girls selected for migration were, with comparatively few exceptions, in point of health and physique, suitable for Canadian farm life and work and domestic service.

GENERAL STATISTICS 1927-28

Inspections	5,807
Visits in addition to above	1,329
Inspections and visits	7,136

As a result of these inspections and visits combined with information from other sources, 2,323 cases were completed during the year and removed from the inspection list.

Four hundred and twenty children under 14 years of age were inspected.

Fiscal Year	1925-26	1926-27	1927-28
Under supervision, April 1	5,896	5,990	5,818
Added to supervision list (new arrivals)	1,862	1,741	2,070
Added to supervision list (reinstated)	93	15	20
Total under supervision in fiscal year	7,851	7,746	7,908
Removed from supervision (inspections completed during fiscal year)	1,861	1,928	2,323
Under supervision March 31 of fiscal year	5,990*	5,818	5,585

* Figure 7,562, page 7, Annual Report 1925-1926, should have read 5,990.

The Boys' Land Settlement Scheme

FARMING CAREERS FOR BOYS IN CANADA

An agreement for the settlement of British boys on the land in Canada has been concluded between the British and Canadian Governments under the Empire Settlement Act, 1922. Under this scheme the British and Canadian Governments propose jointly to expend a total sum of £1,000,000 over a period of ten years in the form of recoverable advances to assist suitable British youths to take up farming in Canada on their own account. An official statement says:—

It is the desire of the two Governments that British boys who are assisted to proceed to Canada between the ages of fourteen and twenty to work on farms should be able to look forward to a definite career on the land. It will apply to boys who have received assisted passages, have passed through the provincial training centres in Canada and who were between fourteen and twenty years of age on arrival in the Dominion. On reaching twenty-one years of age the boys—provided that they have acquired the necessary training and experience by working for wages on a farm in Canada, and have saved approximately $500, will be eligible for a loan not exceeding $2,500 for the purchase of a farm and for stock and equipment. No advances will be made to youths under twenty-one or over twenty-five years of age.

This scheme gives effect, so far as Canada is concerned, to one of the recommendations of the Imperial Conference, 1926, which drew attention to the importance of providing some inducement to settlers to remain on the land oversea, in order to counteract the drift to the cities, and recommended that facilities should be provided to enable suitable settlers to acquire farms of their own—provided that they had gained the necessary local experience and were in a position to make a deposit in respect of the purchase price of the land.

Condensed Statistical History of the Juvenile Immigration Movement since the year 1868

Society or Agency	Year	Children sent to Canada
Miss Macpherson and Mrs. Birt, London, Liverpool (Canadian headquarters, Marchmont Home, Belleville, Ont.)	1868 to 1926	14,578
Miss Rye and Church of England (Niagara-on-the-Lake and Sherbrooke, P.Q.)	1868 to 1928	4,218
Mr. (now) Sir J. T. Middlemore, Fairview, Halifax, N.S.	1873 to 1928	5,109
The National Children's Home and Orphanage (formerly Dr. T. Bowman Stephenson, Hamilton, Ont.)	1873 to 1928	3,206
Mrs. Bilbrough-Wallace (Marchmont Home, Belleville, Ont.)	1878 to 1915	5,529
Cardinal Manning (Ottawa and Montreal)	1880 to 1888	1,403
Dr. Barnardo, Toronto, Ont., and Winnipeg, Man.	1882 to 1928	26,790
Mr. J. W. C. Fegan, Toronto, Ont.	1884 to 1928	3,080
Mr. Wm. Quarrier, Brockville, Ont.	1890 to 1928	4,340
The Catholic Emigration Association and amalgamated societies, St.George's Home, Ottawa	1897 to 1928	7,237
The Salvation Army	1905 to 1928	3,149
Dr. Cossar, Lower Gagetown, N.B.	1910 to 1928	711
Captain Oliver Hind, The Dakeyne Farm, Falmouth (near Windsor, N.S.)	1913 to 1928	110
British Immigration Aid and Colonization Association, Montreal, P.Q.	1923 to 1928	1,709
The Church Army, Winnipeg	1925 to 1928	459
Church of England Society, Council of Empire Settlement, Edmonton, Alta., Indian Head and Melfort, Sask.	1926 to 1928	139
Minor agencies	1897 to 1928	5,932
Total		87,699

TABLE of monthly arrivals of boys and girls, under the age of eighteen years, during the year 1927-28

Month	Boys	Girls	Total
April	362	21	383
May	308	17	325
June	206	29	235
July	194	35	229
August	127	11	138
September	175	14	189
October	168	42	210
November	12	22	34
December	29	5	34
January	67	1	68
February	81	2	83
March	137	5	142
Totals	1,866	204	2,070

STATEMENT showing the number of children and their distribution by provinces

Province	Boys	Girls	Total
Ontario	1,189	132	1,321
Quebec	239	45	284
Nova Scotia	25	2	27
New Brunswick	63	3	66
Manitoba	117	7	124
Saskatchewan	129	4	133
Alberta	78	6	84
British Columbia	26	5	31
Totals	1,866	204	2,070

As an indication of the place juvenile migration occupies in the minds of prominent Britishers, the following extract is quoted from an article by Viscount Allenby in *United Empire* of November, 1927:—

"Lads and lasses of Great Britain, seize the opportunity, go out into the Empire. Don't wait for railways—go on ahead of them; go out into the Blue and bear the brunt; fare like pioneers and heroes of old. Conquer the open spaces and the forests—and when you have conquered the forests remember one thing, don't start cutting them down. Go out, I say and wring from reluctant nature the wealth which she yields only to the adventurous. Then and not till then will you have done your duty, you young people of our country, to the Empire to which you have the privilege and honour to belong. We have not yet reached the zenith of our glory. Standing shoulder to shoulder, the Empire could face the world, whether in peace or in arms—and the wars of peace are even more difficult than the wars of weapons. There is a future before us, such as the world has never imagined, and with God's blessing we should raise this mighty Empire to a height which would defy all competition and in no proud, in no domineering spirit, but in a spirit of altruism, though in helping others we must remember ourselves."

REPORT OF THE DIVISION COMMISSIONER OF IMMIGRATION, EASTERN DIVISION, J. S. FRASER

The Eastern Division extends from the Atlantic coast as far west as Sault Ste. Marie. Inspection is carried on at 103 ports. During the past fiscal year 193,997 persons were examined at ocean ports and approximately 23,054,466 at the boundary ports. Of these persons seeking entry 140,368 were landed as immigrants and 14,934 were rejected and deported. The two following tabulated statements show the disposition of those applying for admission to Canada at the various ports.

Ports	Admissions	Rejections	Non-Immigrants admitted	Sustained	Dismissed	By permit or otherwise	Pending	Investigations	Prosecutions	Total cash deposits
										$
Amherstburg	3									
Andover	1	1	42,947							
Armstrong	28		93,489							
Aroostook Jct	17	4	14,462							
Aultsville		1	27,559							
Beebe Junction	591	301	322,321					5		450
Belleville	1									
Bridgeburg	2,169	2,115	4,694,374	1	23	23	1	93		1,750
Brighton	3		2,458							
Brockville	60	39	82,461	1	1			23		1,000
Clair	2		11,091							
Coaticook	346	25	32,582					58		
Cobourg	6		33,739					1		
Comin's Mills	8		33,602							
Cornwall	61	34	22,241					22		
Debec	8	3	16,916							150
Edmundston	41	7	175,756	1	1		1			
Fosterville			2,660							
Frelighsburg	1	3	51,183							
Gananoque	8		85,573							
Grand Falls	5		64,847							
Halifax	7	1	5,122							
Hamilton	38							1,600		6,850
Hemmingford	22	4	25,237							
Herdman	7	1	25,421							
Huntingdon	218	60	35,180		1	1		6		750
Kingston	27	1	45,958					22		350
Lacolle	843	437	347,347		10	8		8		5,000
Mansonville	15		19,462							
McAdam Junction	80	12	39,177							
Megantic	29	3	6,738							
Midland	4		3							
Milltown	9	16	342,551							
Montreal	227	64	101	1	13	13	7	13,984		48,580
Morrisburg	12	1	11,422							
Niagara Falls	1,746	1,814	5,026,805		15	6	2	956	1	7,450
Niagara-on-Lake			2,172							
Noyan Junction	23	7	29,907							
Ottawa	29	4	21							
Phillipsburg	97	96	126,498							950
Port Dover	7		19,362							
Port Lambton	8		3,266							
Port Stanley	1	3	7,117							
Prescott	136	110	228,792		2		2	3		
Richmond Road	10	7	8,915							
Rockport	7		51,160							
Rouses Point	720	277	62,248		4	7	1			3,950
St. Andrews	2		237							
St. Armand	698	221	83,783	1	3	3				1,300
St. Leonard	26		311,718							
St. Stephen	115	67	659,785		1			2		50
Sarnia	686	334	1,394,085			6		92		1,400
Sault Ste. Marie	368	64	239,120	1		2		96		500
Sombra	2		22,196							
Stanhope	63	54	77,250							475
Sutton	740	196	269,660		2	2				2,610
Toronto	296	60	5,698		13	40		7,013	3	50,040
Trout River	43	235	104,907		1			1		2,425
Walkerville	428	802	863,611							
Walpole Island			36							
Windsor	4,520	7,144	7,798,203		122	44	19	2,773	1	13,250
Yarmouth (via Boston)	20	10	51,455							
Dundee			42,784							
Erieau			377							
Georgeville			2,362							
	15,758	14,638	24,209,510	6	212	155	34	26,758	5	149,280

STATEMENT of immigrant arrivals, rejections, admissions, appeals, etc., at ocean ports

Ports	Immigrant arrivals	Rejected by Board of Inquiry	Appeals				Admitted	Rejected and deported by Board of Inquiry	Cases referred to Board of Inquiry	Investigations	Trans-Atlantic passenger vessels examined	Crew manifests submitted
			Sustained	Dismissed	By permit or otherwise	Pending						
Quebec	64,507	203	.....	52	88	.....	64,392	115	277	50	227	137
Halifax	43,165	126	.....	85	20	13	43,072	93	216	68	229	756
St. John	14,205	46	.....	9	15	2	14,176	29	73	266	52	530
Montreal	309	37	.....	.....	.....	.....	272	37	.....	.....	55	1,600
Sydney	7	6	4	.....	1	1	7	.....	6	514	2	539
North Sydney	846	14	.....	.....	.....	.....	832	14	.....	112	.....	829
Boston	218	.....	.....	.....	.....	.....	218	.....	.....	47	.....	.....
	123,257	432	4	146	124	16	122,969	288	572	1,057	565	4,391

There has been a large increase in the number of persons crossing the International Boundary. This may be accounted for largely by the excellent system of permanent highways completed within the past few years, and the resultant increase in tourist traffic. This movement which has been increasing from year to year will continue to increase and will necessitate the opening of new ports from time to time and the appointment of additional officers. During the summer the Peace Bridge at Fort Erie was opened and from the opening in June until the end of the year roughly about four million people entered over the bridge. Notwithstanding this large movement only a few miles from the bridges at Niagara Falls the traffic at that port was as heavy as the previous year.

GENERAL

The staff numbers 416. Of these 32 are at head office and there are 302 full-time officers and 81 part-time inspectors stationed at the ports of entry. There are 103 such ports, three having been closed during the year. Three of these ports are located in the United States.

Efforts are being made to improve the inspection work at the various ports and also where necessary to secure better inspection facilities. We have been gradually changing at several of the ports our present method of inspection of passengers entering in sleepers, this with a view to having a personal examination in each case. This has been found more satisfactory both from the point of view of the passenger and the department. A movement has also been inaugurated with a view to centralizing the work as much as possible. In the Niagara peninsula five ports have been amalgamated and placed under the jurisdiction of the inspector in charge at Bridgeburg. As a result we have been able to improve the work in these five ports and similar action is contemplated at other central points.

During this year new offices have been erected at the Peace Bridge at Fort Erie, the accommodation being supplied by the Bridge Company as required under the regulations. The Ferry Company at Windsor have remodelled their headquarters along lines suggested whereby the work can be carried on with a smaller staff than under the old system and with more dispatch. New Immigration buildings were erected at the port of Halifax and are a decided improvement over the old quarters affording better landing and inspection accommodation.

REPORT OF THE DIVISION COMMISSIONER OF IMMIGRATION, WESTERN DIVISION, THOMAS GELLEY

The Western Division of the Department of Immigration and Colonization comprises the territory situated between Port Arthur, Ont., and the port of Kingsgate, B.C., taking in part of Ontario, the provinces of Manitoba, Saskatchewan and Alberta, and a portion of British Columbia, and in addition to the work involved in administering the inland territory, there are forty-three ports of entry on the International Boundary where inspectional work is carried on.

Boundary Inspection

During the fiscal year just ended there were 765,664 persons inspected at the various ports on the international boundary in the Western Division. Of these 9,099 were coming forward as settlers, 8,445 being given admission as landed immigrants, 654 being rejected for various reasons, 12,831 were returning Canadians, and the balance, 743,734, were of the tourist or non-immigrant class. Those who came forward as settlers and were legally landed had in their possession cash to the amount of $2,790,738, and effects valued at $1,846,566.

The following comparative figures will give an idea of the work performed on the boundary in this division as compared to that of last year:—

	Admitted	Rejected	Non-Immigrants	Settlers' cash	Settlers' effects
1927–28	8,445	654	743,680	$ 2,790,738	$ 1,846,566
1926–27	8,900	757	680,738	2,519,111	1,125,413
	−455	−103	+62,942	$ +271,627	$ +721,153

While from the foregoing it will be noted that the admission of immigrants during the year has decreased, on the other hand, there is also a decrease in the number of persons rejected. In addition the cash and effects in possession of settlers show a considerable increase over that of last year. This may be taken as an indication that the settler coming from the United States is of a better type and that more are coming with the definite idea of becoming established in Canada.

Tourist traffic this year showed a correspondingly large increase over former years and is a definite indication of the interest which is being exhibited in the Canadian West by our neighbours to the south.

Another encouraging phase of this year's work is evidenced by the return to Canada of a large number of Canadians who proceeded to the United States in former years.

During the year the inspectional staff in the division has been fully employed in carrying on the various phases of inspectional work required on the boundary. Twenty-eight prosecutions were undertaken—convictions being secured in twenty-seven instances, and fines assessed to the amount of $351. Cash bonds in the sum of $29,513 were collected, $27,148 of this being refunded, the balance still being on hand awaiting final disposition.

The following statistical table shows the volume of work carried on at each port during the fiscal year.

Port	Admissions	Rejections	Appeals sustained	Appeals dismissed	Appeals pending	Non-immigrants	Returning Canadians	Value of Settlers' effects	Amount of cash
								$	$
Bannerman	32					3,464	1	3,626	3,685
Bengough	40					1,809	849	3,830	4,815
Big Muddy	45					1,361	29	21,974	15,470
Boissevain						90			
Calgary	80							11,490	24,252
Cardston	17					27	4	7,848	4,816
Cartwright	8					6,548	594	1,235	700
Carway	22					19,285	10	3,150	12,230
Climax	52	1				2,455	97	7,208	62,505
Coutts	860	142		8	2	38,274	949	1,138,745	499,296
Crystal City	3					3,321		140	2,250
Deloraine	2					1,121	249	500	3,000
East Poplar River	51	1				3,167	1,635	8,302	4,082
Edmonton	94							20,405	175
Elmore	9					1,180			
Emerson	1,717	145	5	10		116,872	815	197,226	721,894
Estevan	31					5,631	2,151	8,570	13,615
Flathead	23								
Fort Frances	381	80	3	6		246,953	111	13,100	103,003
Fort William	23		1			68	11	1,230	5,265
Gretna	110	13				32,774	22	3,845	68,067
Haskett	3	2				7,795	7	950	200
Killarney	9	2				3,285	805		
Kingsgate	1,717	121	1	1		54,497	983	182,800	639,932
Marienthal	80	1				10,261	11	14,490	18,392
Morden						845	19		
Mowbray						6,306			
Newgate	30	10				6,472	60	2,185	9,559
Northgate	28					1,020		7,639	3,950
North Portal	2,522	96	7	4	6	58,937	887	99,100	471,634
Pigeon River	102	30				37,541	23	28,295	15,670
Piney	4					3,262	1,396	230	400
Pinhorn						167			
Port Arthur	72	2				8,840	9	14,340	7,005
Rainy River	23	3				42,168		1,350	9,203
Roosville						7,483			
Saskatoon	5							2,150	1,300
Snowflake	15	2				448	3	808	1,800
Sprague	42	1				3,050	7	210	8,526
Twin Lakes	1					1,454			
Waskada	9					400		1,868	35
West Poplar River	43					3,043	902	13,515	3,975
Wild Horse						266	149		
Willow Creek	24					1,740	43	4,917	9,798
Winnipeg	116	2						19,295	39,939
	8,445	654	17	29	8	743,680	12,831	1,846,566	2,790,438

In addition to the foregoing, the inspection of passenger and freight boats at Port Arthur and Fort William was carried on as usual.

Immigrants from Overseas

The movement of families from the British Isles under the 3,000 Family Scheme continued during the past year to be very satisfactory and productive of a splendid type of settler. Many single British farm help and domestics took advantage of the cheap rate and were forwarded to placements throughout the West. Nationals of all countries were accorded every assistance by officers of this division on arrival at Winnipeg; all trains were met and such help and advice as was required was furnished.

Under the operation of the Railways Agreement, the volume of immigration from Central European countries was much larger than in former years.

The opening of Hall No. 3 at the Canadian National Railway relieved the work in Halls No. 1 and No. 2 and accommodated immigrants coming forward over Canadian National Railway lines making them available for quick distribution to points in the West.

Officers detailed for duty in meeting trains co-operated with the officials of the Railway Colonization Departments and the Land Settlement Branch in reticketing and directing new arrivals who were being sent on to final destination and placement, and valuable aid was rendered immigrants and their families in changing trains and in locating relatives.

Immigration Halls

During the past twelve months Immigration Hall No. 1 at Winnipeg has accommodated and sheltered 8,494 immigrants, with an average stay of five days, as compared to last year, when 9,232 immigrants were accommodated with an average stay of three days. The total number of meals supplied during the year amounted to 89,606, these figures including 50,298 provided to deports and 3,194 supplied to matrons and assistants. The increase in the number of meals supplied and in the longer stay in the building, is accounted for by the fact that the peak of immigration was reached during a period of bad weather last spring, which required large numbers of these people being held over for a few days until the employment to which they were being forwarded was available for them.

Immigration Hall No. 2 at Winnipeg, which is set aside for the accommodation of immigrants from Southwestern and Central Europe, has housed during the past year 5,718 individuals as compared with 6,710 last year. This shows a slight decrease which is accounted for by reason of the fact that Hall No. 3 had been opened and was available to take care of this type of immigrant who came forward over Canadian National Railway lines.

Immigration Hall No. 3, which was provided by the Canadian National Railway, accommodated during the fiscal year just ended 10,973 new arrivals. The majority of these were Continentals who came forward under the Railways Agreement, but there were also a number of individuals and families from Great Britain and from the northern parts of Europe who were afforded over-night accommodation until such time as they could be sent forward for placement.

In addition to the Winnipeg immigration halls, halls were maintained at the following points and settlers were given temporary accommodation:—

—	1927-28	1926-27
Athabasca	55	68
Edmonton	4,739	6,830
Edson	23	21
Grande Prairie	338	168
North Battleford	591	516
Peace River	223	8
Prince Albert	745	750
Spirit River	12	114
West Poplar River	36	50
	6,762	8,525

While the foregoing shows a slight decrease in the numbers afforded accommodation as compared with the previous year, this is accounted for by the fact that the various organizations interested in the placement of newly arrived individuals and families, have given better attention to the settlement arrangements, with the result that almost immediately on arrival at destination these were enabled to either proceed to work or to settle on land which had previously been selected for them. At the same time, the accommodation which is afforded by these halls is often indispensible and the service they render to new arrivals in outlying districts is of a very satisfactory nature.

Labour Placement

During the past year the department's Labour Bureau in this office has been worked to capacity and has registered and assisted in placing and arranging rates for 17,261 new arrivals destined to farm employment throughout the prairie provinces. This is an increase of 3,862 over last year, when 13,399 were handled through this office.

The work devolving on the Labour Bureau consists of registering new arrivals, arranging balance of ocean rate, replacing individuals who return seeking more satisfactory placement. In addition, information is given to prospective settlers in regard to farm opportunities awaiting them in the West. A contact is maintained with farmers throughout the West who require farm help, in order that placements may be available for those who seek work through the Labour Bureau.

While large numbers of those placed are new arrivals who have been directed to this office, on the other hand quite a number of placements are in the nature of after-care, being individuals who have come forward and been placed by the Railway Colonization Departments, the Land Settlement Branch and other organizations, and who have returned, either having proven themselves unsatisfactory or not being satisfied with the placement originally arranged. These are redirected to a farmer where it is considered they will have an opportunity of making good in accordance with their capabilities and in many instances, where they are without funds, arrangements are made so that they are enabled to reach their destination. The following table will give an idea of the replacements which have been arranged through this office during the past year:—

British	729	Czecho-Slovak	60
Scandinavian	238	German	53
Polish	140	U.S.A.	38
Ukrainian	129	Russian	23
Hungarian	124	Swiss	13
Dutch	114	Others	30
			1,691

In addition to the foregoing, this office has charge of the distribution and placement of continental domestics destined to the Prairie Provinces. The office register shows 941 as having passed through our hands during the past fiscal year, and of these 461 were placed in employment developed and arranged by this office. The following table gives the figures of these domestics placed by this office:—

Austrian	11	Czecho-Slovak	44
Danish	5	Estonian	4
Finnish	13	German	44
Hungarian	3	Dutch	1
Lithuanian	5	Latvian	3
Jugo-Slav	32	Norwegian	6
Polish	192	Roumanian	9
Ruthenian	5	Swiss	1
Swedish	5	Serbian	3
Ukrainian	75		
			461

Investigational Work and Boards of Inquiry

The investigational work with one exception throughout this division has during the past fiscal year, showed a decided increase. Chinese investigations have decreased by 54, but there is an increase in other immigration investigations as well as Boards of Inquiry.

Investigations	Chinese	Immigration	Total
1927–1928	130	3,880	4,010
1926–1927	184	2,700	2,884

BOARDS OF INQUIRY

1927–28	844
1926–27	675

Deports

The following table shows the number of deports handled by our officers in the Western Division:—

—	1927–28	1926–27	—	1927–28	1926–27
English	273	174	Irish	76	50
Scotch	71	28	Welsh	15	5
U.S.A.	115	92	Chinese	15	30
Polish	32	11	Danish	12	19
Swedish	12	17	Norwegian	57	16
Finnish	16	15	Dutch	17	9
Russian	11	6	Czecho-Slovak	24	14
Hungarian	10	6	German	13	19
Swiss	21	8	Greek	.....	1
Icelandic	.....	2	Galician	.....	2
Jugo-Slav	13	6	Italian	3	1
Newfoundlanders	1	1	Roumanian	6	4
Mexican	.....	1	Belgian	1	3
Japanese	.....	1	Australian	4	1
French	1	1	Austrian	2	1
Children born in Canada	33	20	Danzig Free State	1	.....
Estonian	1	.....	Lithuanian	1	.....
New Zealanders	1	.....	Serbian	2	.....
Spanish	1	.....	South African	1	.....
				862	564

Increase..... 298

British Immigrant Children

During the fiscal year 520 British immigrant children were inspected as compared with 428 last year, being distributed throughout the provinces as follows:—

Manitoba	289
Saskatchewan	164
Alberta	67

Grain Warehouse

As in former years, samples of grains and grasses were prepared by the Grain Warehouse staff and forwarded to our agents in England and the United States for exhibition purposes, and numbers of school boxes were forwarded to various points in the United States.

458 Cases were made and used in forwarding samples of grains and grasses to the various agents.

105 Boxes containing threshed grain.

322 Crates containing vegetables.

235 Cases containing cereals, cheese, honey, etc.

201 Small cases containing school exhibits of grain and grasses—forwarded to schools in the United States.

Winnipeg Office

The volume of work in the Winnipeg office has shown a material increase during the year.

Mail	Incoming	Outgoing
1927-28	80,538	77,988
1926-27	62,692	67,052
Increase	17,846	10,936

Enquiries at the counter in regard to assisted passages, naturalization, passports, proposed immigration and other phases of the work have also been greatly on the increase.

While there are numerous other activities and phases of the work performed by the staff in the Western Division which cannot be covered in this report, I have endeavoured to give a more or less complete review of the year's activities and the results which have accrued.

In closing, I should like to draw attention to the fine spirit of co-operation which has been in evidence during the past fiscal year in so far as the various organizations interested in colonization are concerned, the Labour Bureaus and the Land Settlement Branch, which have in no small way tended to overcome the many difficulties which must be experienced in the successful settlement of potential Canadians in Western Canada.

REPORT OF THE DIVISION COMMISSIONER OF IMMIGRATION, PACIFIC DIVISION, A. E. SKINNER

During the fiscal year 1927-28 there was an increase in the number of persons admitted to Canada at ports of entry in the Pacific District, as compared with the preceding twelve months. The total number of immigrants landed was 4,501 as compared with 4,024 for the previous year.

Statement of admissions, rejections, appeals, etc., at Ocean ports

Port	Admissions	Appeals			Entry by Permit	Non-immigrants Admitted	Returned Canadians	Ships' Crews examined	Number of ships entered	Administrative Fines
		Rejections	Sustained	Dismissed						
Vancouver	1,386	14	3	14	2	4,590	1,080	68,303	1,436	7
Victoria	475	9	6	8	1	3,499	881	54,015	411	3
Other ocean ports	66	.....	.....	.....	.....	25,645	23	42,266	1,250	.....
Total	1,927	23	9	22	3	33,734	1,984	164,584	3,097	10

STATEMENT of admissions, rejections, appeals, etc., at Border Ports

Port	Admissions	Rejections	Appeals sustained	Appeals dismissed	Prosecutions	Non-immigrants Admitted	Returned Canadians	Permits
Aldergrove	12	9		3	1	43,663	21	
Carson						13,722	2	
Cascade	9					20,949		
Douglas	71	54		1		100,568	173	
Grand Forks	25	2				678	34	
Huntingdon	148	32	5			130,878	55	
Nelway	13					6,406	14	
Osoyoos	81					26,619	12	
Pacific Highway	767	441	4	19		392,825	610	
Rykerts	63					17,114	176	
Seattle						113,508	259	
Vancouver	459	7		3	2		103	2
Victoria	280	35	1			33,201	281	
Waneta	46	15		1		5,718	24	
White Pass	9	2				11,548		
White Rock	453	60	2	14		54,989	350	
Other ports	138	6				121,500	10	
Totals	2,574	663	12	41	3	1,093,886	2,124	2

MONEY deposited in lieu of bonds

Port	Number of Deposits	Total Amount	Amount Refunded	Amount Forfeited	Amount Pending
Vancouver	207	264,250	231,350	5,600	27,300
Victoria	104	20,350	15,550	1,000	3,800
Other Ports	85	9,168	8,868		300
Totals	396	293,768	255,768	6,600	31,400

During the year 401 boards of inquiry were held in this district, as follows:—

Vancouver	121
Victoria	33
Places other than ports of entry	247
Total	401

DEPORTATIONS

Two hundred and thirty-six persons were deported from the Pacific Division, of which one hundred and forty-four were deported from Pacific coast ports and ninety-two were taken east for deportation by deportation officers from other divisions. Causes for deportation were as follows:—

—	To United States	To Other Countries
Accompanying	2	15
Criminality	19	39
Drug Addicts	3	48
Insanity	2	21
Public charges		20
Previous deportation	3	
Entry by stealth, misrep[illegible]tation, etc.	4	25
Other causes	7	28
	40	196

Drug Addicts

There have been 51 aliens deported from ports in this division under the provisions of the Opium and Narcotic Drug Act, 39 of these convictions being made in British Columbia and 12 originating in the Eastern and Western Divisions.

Investigations

At places other than ports of entry, 149 investigations of various kinds were conducted and 247 Boards of Inquiry held by investigating officers.

Regular visits have been paid to provincial jails, penitentiaries, mental hospitals, sanatoria and other public institutions by investigating officers and the cases of all aliens in such institutions have been carefully investigated with a view to establishing their status in Canada.

During the year 47 British immigrant children residing in this province were inspected and the living conditions found to be very satisfactory. This is the smallest inspection report for a number of years owing to the fact that there were very few juvenile immigrant children brought to Canada and sent to this province during the past year.

No new ports were opened but the office at Port Simpson was closed on February 29, 1928. Six new officers have been appointed in this district during the past year, four part-time immigration officers and two to fill the duties of full-time officers.

From April 1, 1927, to March 31, 1928, but three applications were made by Chinese to enter Canada under the provisions of paragraph "C" of section 5 of the Chinese Immigration Act. Two of the applications referred to were made by bona fide students who were coming to attend Canadian universities and their entry was authorized at the port of Vancouver. The third application was made during the latter part of March by an alleged merchant and a decision regarding his admissibility has not been reached. It will therefore be seen that the number of Chinese attempting to qualify for admission as immigrants remains negligible since the passing of the 1923 legislation.

There have been sixty Chinese temporarily admitted during the fiscal year under section 9 of the Chinese Immigration Act, forty of whom arrived at Vancouver and twenty at Victoria. This is a decrease of eight from the figures of last year.

Systematic searching of transpacific vessels has been undertaken and in addition during the last four months officers have kept a continuous watch on steamships during the time they have been in port. The fact that no stowaways have been discovered would indicate the measures taken have checked any attempts at illegal entry by this means.

There has been only one attempt at entry by impersonation. In the case referred to a Chinese arrived misrepresenting himself as a person who had registered out to visit China. The impersonation was readily detected and after a term of imprisonment was served as a result of a successful prosecution under the Provisions of section 32 of the Chinese Immigration Act, the impersonator was deported.

There were eight desertions of Chinese seamen during the period under review. These desertions were all during November, 1927, and since that time extra precautionary measures have been taken both by the transportation interests and by our officers to see there is no recurrence.

The travel through Canada of overland Chinese has been less than the previous year, 4,108 of this class being handled during 1926-27, and 3,183 during 1927-28. There has also been a decrease in the number of outward registrants under section 23 of the Chinese Immigration Act. The figures for last year were 5,573 and for the year just ended 4,731. During the year 335 Chinese who regis-

tered out have lost their right to return by not applying for readmission within the statutory period of two years and 213 left Canada without applying for outward registration, thereby forfeiting their right to return.

There has been a total of seven head taxes collected, five under the provisions of section 27 of the Chinese Immigration Act, three at Vancouver, and two at Victoria, and two to cover the admission of Chinese women whose cases had been outstanding through court action since 1923.

Following is a table covering Chinese immigration figures for the years 1926-27 and 1927-28:—

—	1926–27		1927–28	
	Victoria	Vancouver	Victoria	Vancouver
Admitted to Canada under Paragraph (c) of Section 5	.....	2	.....	2
Applications based on Section 5 rejected	.....	.....	2	.....
Persons deported after rejection	1	17	2	.....
Admitted under Section 9	10	58	20	40
Chinese deported after proceedings Section 26	.....	6	3	7
	(3 from other provinces)		(2 from other provinces)	
Awaiting decision on appeal after deportation ordered under Section 26	3	1	.....	1
Prosecutions under Section 32, Sub-sec. 1	.....	2	.....	1
Chinese stowaways apprehended by search of incoming vessels	.....	15	.....	.....
C. I. 9 registrations	1,525	4,048	1,250	3,481
C. I. 9A registrations	146	101	125	99
Chinese returned and re-admitted under C.I. 9 registration	1,593	3,345	1,158	2,871
C.I. 9 registrations marked expired on failure of registrants to return within two years	176	297	99	236
Chinese leaving Canada without applying for outward registration	74	190	54	159
Persons admitted under bond in transit to other countries	241	2,184	222	1,035
Persons passed out of Canada after being admitted in transit to China at other ports	331	1,352	243	1,683
Persons paying Head Tax as provided for in Section 27	1	1	2	3
Section 18 registrations	29	51	35	64
Native born re-admitted	.....	.....	102	73

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE

YEAR ENDED MARCH 31

1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., etc., etc., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Indian Affairs for the fiscal year ended March 31, 1928.

Respectfully submitted,

CHARLES STEWART,
Superintendent General of Indian Affairs.

OTTAWA.

CONTENTS

PART I

	Page
Report of the Deputy Superintendent General	7
Indian Health Supervision	7
Farming and Stockraising among the Prairie Indians	10
Education	11
Lands and Timber	14
Lands	14
Location Tickets	15
Leases	15
Enfranchisement	15
Timber	15
Buildings	16
Surveys	17
Bridges, Drainage, Irrigation Systems, Roads and Dyking	18
Summary of Indian Affairs in the Various Provinces	19
Ontario	19
Quebec	20
New Brunswick	21
Nova Scotia	21
Prince Edward Island	21
Manitoba	22
Saskatchewan	22
Alberta	23
British Columbia	23
Northwest Territories	24
Yukon	24
Financial	25
General	25

PART II

Tabular Statements—	
No. 1—Census	28
No. 2—Grain; Vegetable and Root Production	32
No. 3—Land; Private and Public Buildings and Property	36
No. 4—Live Stock and Poultry; General Effects	40
No. 5—Value of Real and Personal Property and Progress during year	44
No. 6—Sources and Value of Income	48
School Statement	52
Indian Land Statement	65
Civil Government	67
Appropriation Accounts	67
Indian Trust Fund	70

PART I

REPORT

OF THE

DEPUTY SUPERINTENDENT GENERAL OF INDIAN AFFAIRS

FOR THE YEAR ENDED MARCH 31, 1928

REPORT OF THE DEPUTY SUPERINTENDENT GENERAL

OTTAWA, November 1, 1928.

Hon. CHARLES STEWART,
Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the report of the Department of Indian Affairs for the year ending March 31, 1928.

INDIAN HEALTH SUPERVISION

All matters appertaining to the health of Indians are conducted by the Department of Indian Affairs. The department staff has recently been strengthened by the addition of a medical director, and the creation of a definite Medical Branch, which is expected to prove of great value in supervising and co-ordinating the various health activities.

The outstanding event of the past year was the epidemic of influenza which swept the basin of the MacKenzie river during the month of July. The disease, which was of a very severe type, broke out at Fort Smith, and spread to the Great Slave lake and down to Aklavik with great rapidity. This vast region is inhabited by scattered bands of Indians whose needs are ministered to by Indian agents and doctors at Fort Smith, Fort Resolution and Fort Simpson, and by missionaries and church establishments at these and other points. At Hay River there is a mission school and at Fort Smith, Fort Simpson and Aklavik are small mission hospitals. The doctor at Fort Smith was out of the country on leave of absence, but was at once replaced by a doctor from Edmonton. The doctor at Fort Resolution and the mission personnel at that point and at Hay River looked after the Indians about the Great Slave lake. The doctor at Fort Simpson followed the epidemic down the river to Aklavik. All the workers were handicapped by lack of drugs and supplies, owing to the fact that the year's supplies had been burned in a warehouse fire at Edmonton where they were collected for shipment by the first boat of the season. Emergency supplies were sent in. Accounts of the epidemic which have reached the department tell of whole settlements stricken at once, so that there were not enough well persons to care for the sick or bury the dead, of mission workers carrying on though suffering from the disease themselves, and in one or two cases, of isolated families or small settlements being completely wiped out. The reports of the workers are modest in the extreme as to the services they rendered, but an officer of the Department who was in the country at the time, pays a glowing tribute to their devotion and self sacrifice. The toll of death was heavy, and many widows and orphans are left.

It is difficult for those who have no intimate acquaintance with the primitive Indians of the remote parts of the north to realize their attitude toward a widespread outbreak of a dangerous disease such as influenza. They become discouraged and hopeless, and their fear and fatalism prevent their co-operation with those whose advice and help would assist their recovery.

TUBERCULOSIS

During the summers of 1926 and 1927 a committee of experts under the auspices of the Canadian Tuberculosis Association, carried out for the department a survey of tuberculosis among the Indians of British Columbia, and presented a very valuable report. Their findings agree with those of investigators in other parts of the country and with the observations of departmental

physicians. Tuberculosis is about five times more common among Indians than among the general population. Several factors contribute to its prevalence. In many tribes tuberculosis has been comparatively recently introduced, and the resistance possessed by the white race has not yet been acquired. The food supply which would produce in the individual the robust health to enable him to resist invasion by the disease and to cast it off after invasion is not available, nor have the Indians learned in many cases to make good use of the supplies to be had. Living conditions are far from ideal, and ignorance prevails as to the method of spread of contagion. With the exception of a few tribes, the Indians have not the background of education and experience which would enable them to take full advantage of the knowledge of public health available at the present day.

The problem is a very serious one, but the outlook is not hopeless. Bands of Ontario Indians, who were expected to disappear from this cause some fifty years ago, are now rapidly increasing. The Blackfoot tribes of Alberta, whose numbers were greatly reduced following their infection in the latter quarter of the last century, are now holding their own. The solution of the problem depends as much on the improvement of economic conditions as on medical attendance and public health instruction. The department is using every recognized method of combating the disease, and the situation has shown a definite improvement in recent years. With somewhat increased funds at its disposal, there is reason to hope for more rapid progress in the future.

Diseases of the Eye

Trachoma is reported from time to time as existing among Indians. The committee which investigated tuberculosis in British Columbia also interested itself in eye conditions, and from this and other sources of information, it may be stated that this eye disease is very rare among Canadian Indians, if indeed, it exists at all. There is however, a condition which is prevalent in the mountains and foothills, and occasionally appears elsewhere, which is of importance. It consists of an acute inflammation of the eye, with a small ulcer on the eyeball, and often leads to impairment of vision. It occurs chiefly among undernourished children, and is probably to a large extent a deficiency disease. The department is devoting special attention to its treatment.

Hospital Services

In the more remote districts and at certain large reserves the department maintains hospitals for the use of Indians alone. During the past year new units have been opened at the Six Nations Reserve in Ontario, at the Peigan Reserve in southern Alberta, and at Ile-a-la-Crosse in northern Saskatchewan, where the hospital is a joint enterprise between the department and the Government of Saskatchewan.

The new hospital on the Six Nations Reserve at Ohsweken was opened on October 16, 1927, by Their Excellencies, the Governor General and the Viscountess Willingdon, who graciously gave permission that the institution should be known as the Lady Willingdon Hospital. This hospital has already proven its worth, and is used by the Indians to its fullest capacity. A new unit is under construction at the Blood Reserve in southern Alberta where a very successful work has been carried on for many years under great difficulties. The department requires a high standard of service from its hospitals and they are considered to be equal in quality to any other institutions of similar size.

In many places hospitals are maintained by church organizations, and the department co-operates by furnishing some equipment and supplies, and in some cases by providing grants of money for building and upkeep. In all parts of the country the services of local hospitals and sanatoria are available for Indians, and a very large use is made of these institutions. Indians are rapidly overcoming their old distrust of hospital treatment, and hospitals are more and

more welcoming them as patients. It is becoming increasingly apparent that Indians are as hopeful subjects for modern treatment as white people. Rates paid for hospital care vary in accordance with local conditions and with any other assistance which the department gives to institutions.

Doctors' Services

In some remote places the department employs full time physicians, and in several instances these doctors furnish the only medical service available for the white population as well as Indians. Seven such positions are maintained, and in four other cases the position of Indian Agent is filled by a doctor. For the most part, however, the needs of the Indians are served by the employment of a physician, on part time or on call, who resides near the reserve. There are over two hundred and fifty doctors so employed. The services of specialists in surgery and eye, ear, nose and throat diseases are retained in large centres for the benefit of Indians in the surrounding country.

There are certain districts, where the Indians are of such primitive and nomadic habits and live over such an extended area that it is impossible to do more than send a doctor once a year to visit them when they are collected to meet the department official who pays the annuity money. The doctor accompanies the paying officer, treats cases of disease, vaccinates the Indians, and gives them simple talks on health and sanitation. In northern Quebec a doctor has been employed for several summer seasons to patrol the Transcontinental railway, and his work has resulted in a considerable improvement in habits of living among the Indians of the region. Some of the journeys made by these doctors involve great hardship.

Field Nurses and Matrons

The department has maintained for some years a staff of four travelling nurses in the Prairie Provinces and of one in Nova Scotia. These nurses make periodical visits to reserves and schools. Their duty is to instruct the Indian women in the care of children and home-making in general, to examine school children for defects, and to report cases of defect or illness to the Indian Agent and physician. In some instances these nurses have been able to hold very successful clinics to which the Indian mothers bring their babies for inspection and advice. In British Columbia two resident nurses are maintained, and in Alberta one. The work of these nurses is very satisfactory, and it is hoped that it will be possible to extend the service. On one reserve where infant mortality was unusually high, an enormous improvement followed the installation of a resident nurse.

In places where the number of Indians is not large enough to justify the employment of a more highly skilled worker, the services of a neighbour white woman are retained as a field matron. These women have usually the advantage of the advice of a physician, and in some cases of visits from the travelling nurses. Some of them possess considerable nursing experience, but their main function is to give instruction and advice in housekeeping and the care of children.

The department is also making a beginning in the way of co-operation with the various provincial and voluntary organizations which maintain District Public Health nurses. In some cases the assistance of the department makes it possible for a district nurse to be employed in a municipality to the mutual advantage of both the Indians and the white people there.

Medical Care of School Pupils

Every residential school, except a very few where such service is not available, has the advantage of the regular oversight of a physician, and in many cases the pupils' health is cared for by a resident nurse. Pupils in day schools are examined by agency physicians and travelling nurses. This service is capable of further development, and it is hoped that it may soon be possible to

have a system of regular inspection of every Indian school pupil. All candidates for entrance to residential schools are examined before admission, particularly for the presence of active tubercular disease. Drugs and surgical supplies are furnished to principals of residential schools, and a considerable expenditure is made for the remedy of physical defects such as eye conditions and diseased tonsils and teeth which would tend to retard the studies of the pupils or make them subject to the invasion of tuberculosis.

Communicable Diseases

Epidemics of communicable disease arise from time to time on Indian reserves. The department has, during the past year, devised a set of regulations for the control of these diseases which promises to be of great advantage. Constant effort is put forth to keep vaccination against smallpox up to date, and a beginning is being made toward immunization against diphtheria.

Although the department is sometimes handicapped in the beginning of an epidemic by the reticence of the Indian in such matters, it has an advantage over white communities in the matter of the possibility of enforcing regulations once the outbreak is discovered. In a recent outbreak of smallpox practically every Indian was vaccinated within one week after the diagnosis was established, a procedure which would be difficult to carry out in any white Canadian community. The services of travelling nurses are of value in epidemics, as they are at once available for duty in such emergencies anywhere in the district which they cover.

The Department of Indian Affairs has no reason to feel ashamed of its medical service from a remedial standpoint. No appeal for medical treatment from a Canadian Indian goes unheeded, and no expense is spared to give the sick Indian the benefit of the best medical and hospital care available. There is, however, a vast field of preventive medicine which would yield a rich harvest in improved health and economic efficiency of Indians. It is the aim of the department to greatly extend the preventive side of its effort, but such action must await the provision of increased funds, and, to some extent, the awakening of interest in Indian health, on the part of both the Indians themselves and the general public, in the one case toward the support of the Government in making increased expenditure, and in the other toward the realization of the need for improvement.

FARMING AND STOCK-RAISING AMONG THE PRAIRIE INDIANS

Farming

The spring was somewhat late, and the seeding of wheat at many points was not completed until after the 15th of May. The area under crop has shown an increase of 1,867 acres over the previous year. The seed went into the ground in good shape, and up to the middle of August the indications were for the heaviest crop in our farming history. However, about that time we had a succession of frosts, which injured the crops throughout the whole farming area in Saskatchewan and northern Alberta. The grade of the grain has, of course, been reduced considerably by this, but at the time of writing it is not known just what the extent of the damage has been. There have been between seventy-five and eighty-five threshing outfits at work at the present time, and notwithstanding the loss sustained by frost it is estimated that the Indians will harvest considerably over a million and a quarter bushels of grain. The oat and barley crops are fair. The former, however, is not as heavy as was expected, but the Indians will have a good supply of feed for their animals during the coming winter. During the summer the Indians prepared a large amount of summer-fallow; this work has been well done, and is quite equal to that of the white farmers. As years go by there is a decided improvement in the manner in which the Indians are attending to this branch of the work. The amount summer-fallowed in the three provinces this year was 33,815 acres, an increase

of 6,310 acres over last year. In addition to this they broke 5,848 acres, which was well done, and this has brought their total area under cultivation up to 105,312 acres. The Indians, during the past year, have purchased a large number of horses and increased their farming equipment considerably, and on many of the reserves they now have good working outfits. The horses are of a better type and are receiving better care at the hands of the Indians than ever before.

CATTLE

The cattle herds have increased considerably during the past year—between two and three thousand head. On some reserves the increase has been greater than on others, and this is due to the fact that the Indians at these points are giving closer supervision to their cattle. The herds of the Indians are now among the finest in Western Canada, and their cattle bring the highest prices on the Winnipeg and other markets. In one carload of cattle from an Indian reserve, the steers netted $205 each. This, of course, is an enormous price, and shows that the cattle must have been exceptionally fine. The increase in calves this year will amount to between five and six thousand head. It is, of course, impossible to give the exact number, as an actual count cannot be made at this time, but it is known that the calf crop is most satisfactory. During the past season the department purchased between fifty and sixty thoroughbred bulls at the various sales conducted under the auspices of the provincial Department of Agriculture, and they are the finest that can be procured. Ninety per cent of the Indians' cattle are of the Shorthorn breed, which seems best adapted to their requirements. The Indians have sold in the neighbourhood of 1,500 head of steers and cows during the summer and fall, and in addition to this they have provided beef for their own needs on all reserves throughout Western Canada, and still their herds are increasing. There was a time not very long ago, when it was necessary to let contracts for large quantities of beef, to outsiders, but this is now a thing of the past, as in future the Indians will be able to provide their own beef.

EDUCATION

During the past few years, there has been an encouraging increase in the attendance of Indian children at the schools maintained by the department. For the fiscal year 1927-28, there was an enrolment of over 15,000 and the percentage of attendance was a record one. The following table shows the increasing nature of Indian educational work. More pupils are attending and they are attending more regularly:—

Fiscal year	Enrolment	Average attendance	Percentage of attendance
1915-16	12,799	8,080	63·13
1916-17	12,178	8,285	68·03
1917-18	12,413	7,878	63·46
1918-19	11,952	7,601	63·59
1919-20	12,196	7,649	62·71
1920-21	12,558	8,074	64·29
1921-22	13,021	8,668	66·56
1922-23	13,723	9,106	66·35
1923-24	13,872	9,188	66·23
1924-25	14,222	9,879	69·46
1925-26	14,782	10,598	71·69
1926-27	14,710	10,541	71·66
1927-28	15,018	10,866	72·35

A total of 340 Indian schools were in operation during the year—77 residential, 251 day and 12 combined white and Indian day schools. In Part II of this report will be found a list of these schools, showing the names of principals or teachers, locality, enrolment and attendance. Compared with the previous year, there was an increase of one day school.

Further efforts were made during the year to increase the efficiency at both residential and day schools. Closer supervision, better qualified instructors, more intensive vocational training and better buildings were the aims of the department. Parliament provided a record appropriation of over two million dollars, and it was possible to make many improvements in connection with both personal services and physical equipment. At Caughnawaga, a large brick building was erected for the important day school activity there. This school is now on a par with a good city public school. A staff of 14 Sisters and 4 lay teachers are engaged in Caughnawaga village. In addition, there is a separate school for Protestant children. The old main building at the Onion Lake Roman Catholic and St. George's Indian residential schools, in Saskatchewan and at Lytton, British Columbia, respectively, were replaced by modern schools, fully equipped for the maintenance and training of Indian children. At St. Philips, Sask., a small residential school was erected near the site of the old Roman Catholic boarding school, which was closed in 1913. Arrangements were made for the establishment of a much needed Indian residential school at Shubenacadie, N.S. A site with the necessary farm was secured and a suitable staff engaged.

Whenever opportunity offered, better qualified teachers were secured and the department insisted that suitable vocational instructors were employed by those managing the residential schools. At these latter institutions, special attention to the training in farming and in the manual and domestic arts was given by the department's inspectors and agents.

More regular attendance and better teachers and equipment have had an interesting effect on the academic standing of the pupils. The following table shows the percentage of the total enrolment that was reported as in Grade 5 and higher:—

Fiscal year	Total enrolment	Enrolment in Grade 5 and up	Percentage
1910–11	11,190	780	6·97
1911–12	11,303	828	7·32
1912–13	11,144	734	6·58
1913–14	11,714	766	6·54
1914–15	12,468	834	6·69
1915–16	12,799	897	7·01
1916–17	12,178	955	7·84
1917–18	12,413	903	7·27
1918–19	11,952	878	7·34
1919–20	12,196	889	7·29
1920–21	12,558	929	7·39
1921–22	13,021	1,046	8·03
1922–23	13,723	1,187	8·65
1923–24	13,872	1,187	8·56
1924–25	14,222	1,322	9·29
1925–26	14,782	1,468	9·93
1926–27	14,710	1,664	11·31
1927–28	15,018	1,957	13·03

Of the 1,957 pupils who were in the higher grades during the year, 65 were studying high school work. These students were enrolled in Indian schools. In addition, there are approximately 140 Indian young men and women attending collegiates, business schools, colleges and universities. Of these 110 are receiving some assistance from Parliamentary Appropriation for Indian Education.

The co-operation of the churches in the management of Indian residential schools was as follows for the year 1927-28:—

Roman Catholic	42 residential schools: enrolment	3,822
Church of England	20 " " "	1,508
United Church	13 " " "	1,300
Presbyterian	2 " " "	165
Total	77 " " "	6,795

The expenditure for Indian education from parliamentary appropriation for the fiscal year ended March 31, 1928, amounted to $2,033,375.10, as follows:—

EXPENDITURE FOR YEAR 1927-28—INDIAN EDUCATION VOTE

—	Day schools	Residential schools	Ex-pupils	Special salaries and travel	Tuition	Freight, express, etc.	Stationery	Miscellaneous	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	15,147 15	11,004 20	.....	.....	12,103 95	.....	312 98	.....	38,568 28
Prince Edward Island	620 66	.....	.....	.....	74 50	.....	26 53	.....	721 69
New Brunswick	21,769 29	.....	.....	995 10	608 17	.....	1,931 53	.....	25,304 09
Quebec	115,714 04	.....	.....	.....	3,716 39	2 50	2,711 04	.....	122,143 97
Ontario	45,803 03	217,888 55	.....	125 00	5,874 44	511 36	9,514 33	366 05	280,082 76
Manitoba	64,045 76	185,242 44	180 09	.....	237 97	838 79	4,141 11	.....	254,686 16
Saskatchewan	36,739 56	427,798 30	43 98	.....	1,170 00	984 46	5,343 99	1,030 57	473,110 86
Alberta	1,328 13	261,112 83	1,177 85	.....	16 00	781 85	4,334 54	4,452 16	273,203 36
British Columbia	52,618 81	447,670 46	72 33	2,519 30	555 04	469 03	6,920 24	310 10	511,135 31
Northwest Territories	1,022 00	31,919 85	.....	.....	.....	265 78	1,132 45	.....	34,340 08
Yukon	3,855 00	16,411 96	.....	.....	.....	220 46	11 12	.....	20,498 54
	358,663 43	1,599,048 59	1,474 25	3,639 40	24,356 46	4,074 23	36,379 86	6,158 88	2,033,795 10
Less amount refunded from Vote 535 re Flat Increases	.....	.....	.....	.....	.....	.....	.....	.....	420 00
									2,033,375 10

The expenditure shown above was augmented by the contributions made by certain Indians whose tribal funds have for many years been used to meet the cost of schools upon their reserves. During the past year the total expenditure from this source has been $62,215.18. The table following gives the details of the charges.

The contributions from the Interest Account of the Trust Funds were for current expenses, salaries of teachers, minor repairs and tuition grants. The expenditure from Capital was for repairs to day school buildings on the Six Nations reserve and for a new classroom and teacher's residence at the Dokis Indian day school.

It is of interest to note that this statement will not be found in any future report. Parliament has provided appropriation for the fiscal year 1928-29 to meet the charges heretofore borne by Indians. Free education for the Indians was definitely imposed by treaty in some provinces and by usage in others and as the only exceptions to the general rule were made in the case of Indians of the provinces of Ontario and Quebec who were fortunately in possession of tribal funds, it seemed discrimination to refuse to extend to them the bounty of the Government in this regard. It has therefore been decided that in future the education of these Indians shall be carried on without cost to them, thus completing a system of free education to all the Indian wards of the Crown in Canada.

—	Capital	Interest
	$ cts.	$ cts.
1. Batchewana Band	.....	2,384 54
2. Chippewas of Beausoleil	.....	1,092 46
3. Chippewas of Nawash	.....	3,925 17
4. Chippewas of Rama	.....	1,568 03
5. Chippewas of Sarnia	.....	1,205 43
6. Chippewas of Saugeen	.....	3,681 73
7. Chippewas of Snake Island	.....	330 78
8. Chippewas of Thames	.....	706 40
9. Chippewas of Walpole Island	.....	200 00
12. Garden River Band	.....	2,081 44
13. Henvey Inlet Band	.....	552 95
14. Lake Nipissing Band	.....	1,048 00
15. Manitoulin Island (unceded)	.....	468 39
17. Mississaguas of Alnwick	.....	862 04
18. Mississaguas of Credit	.....	1,131 85
19. Mississaguas of Rice Lake	.....	180 00
20. Mississaguas of Mud Lake	.....	262 00
22. Mohawks Bay of Quinte	.....	3,455 77
23. Moravians of Thames	.....	1,276 12
30. Parry Island Band	.....	347 15
32. Serpent River Band	.....	500 00
33. Six Nations of Grand River	737 23	19,470 29
34. Shawanaga Band	.....	1,016 37
38. Whitefish River Band	.....	1,524 55
46. Iroquois of St. Regis	.....	2 50
50. River Desert Band	.....	623 81
79. Chippewas Kettle and Stony Point	.....	1,034 71
82. Whitefish Lake Band	.....	1,095 83
182. Dokis Band	4,013 04	775 40
246. Sheguiandah	.....	620 37
247. Sheshegwaning	.....	1,708 54
249. Sucker Creek	.....	950 53
251. West Bay Band	.....	1,381 91
Totals	4,750 27	57,465 11

LANDS AND TIMBER

Lands

Sales of Indian lands and collections of payments on account of previous sales showed decided improvement during the year. For this continued satisfactory crop conditions in Western Canada were mainly responsible as a large proportion of surrendered lands sold for agricultural purposes are located in the three Prairie Provinces.

In the fiscal year 1927-28 new lands sales in area amounted to 11,480·35 acres, realizing $113,956.70. Details concerning this phase of Indian land administration appear elsewhere in this report. It may be noted that the total quantity of surrendered Indian lands at present available for sale is 242,958·64 acres, and the principal outstanding on account of sales, $1,634,306.78. As Indian lands are invariably sold on terms extending over a period of years the most of this large amount represents payments or instalments which have not to date fallen due. From the three Prairie Provinces during the year the sum of $325,631.81 was collected on account of sales, a most satisfactory proportion of the amount outstanding. From the surrendered Blackfoot reserve lands alone was received the sum of $219,530.73. Most of the collections on this reserve were made under what is known as "crop share agreements," a system recently inaugurated by the department whereby a percentage of each year's crop is set aside and sold and the entire proceeds credited to land purchases. This system has proven even more successful than anticipated and wider application to Indian land sales will undoubtedly be made.

Leases

Under the provisions of section 11 of the Regulations for the Disposal of Indian lands, leases were issued to white men at the request of Indian locatees to the number of 86, and on March 31 last there were 1,253 leases current.

Location Tickets

Location tickets, granting title under the provisions of the Indian Act, to individual owners for lands on the reserves were issued during the past year to the number of 69, and on March 31 last there were current 2,604 location tickets.

Enfranchisement

Under the provisions of section 114 of the Indian Act (formerly section 122A) there were enfranchised during the past fiscal year 36 Indians, heads of families, comprising a total number of men, women and children of 94. Under section 110 of the Indian Act (formerly section 107) there were 10 Indians enfranchised, comprising 42 men, women and children.

Land Patents

During the fiscal year 1927-28 there were issued 234 patents to Indian lands purchased and paid for in full.

Timber

The quantity of timber cut for sale from Indian Reserves in the Dominion during the 1927-28 season was somewhat less than in the previous year.

The kinds and quantities cut, were as follows:—

Pine (white)	1,122,186	f.b.m.	Ash	15,553	f.b.m.
Pine (red or Norway)	222,643	"	Elm	105,607	"
Pine (yellow or bull)	3,532,720	"	Oak	33,508	"
Pine (jack or banksian)	506,620	"	Basswood	161,006	"
Spruce (various)	3,039,432	"	Walnut	400	
Hemlock (western)	3,242,116	"	Poplar	135,819	"
Hemlock (eastern)	1,333,986	"	Cottonwood	216,014	"
Cedar (red)	2,146,308	"	Cordwood (mixed)	8,317¾	cords
Cedar (white)	884,954	"	Pulpwood	36,406¾	"
Fir	7,147,536	"	Shingle bolts	92½	"
Balsam	203,871	"	Ties	24,310	
Maple	1,250,365	"	Poles	1,819	
Birch	615,996	"	Posts	4,555	
Beech	186,823	"	Piling	4·374	lin. ft.

The total quantity of timber cut for sale, in terms of board measure feet was approximately forty-nine and one-half million, and in addition to this the Indians cut approximately eight million f.b.m. for their own use, for building, fencing and fuel.

Sales of timber during the year were:—

Matsayno Reserve, B.C.	Deposit	$ 332 50
Nanoose Reserve, B.C.	"	150 00
Nooaitch Grass Reserve, B.C.	"	600 00
Langley Reserve, No. 5, B.C.	"	375 00
Saughanaught Reserve, B.C.	"	50 00
Gros Cap Reserve, Ont.	"	2,000 00

Cash receipts were as follows:—

License dues and royalties	$ 60,002 87
Permit dues	18,889 28
Rentals and fees	2,325 50
Deposits	3,507 00
Payments on o/s and a/cs	459 08
Trespass dues	556 68
Fines	64 00
Interest	20 52
Sand and gravel royalties	4,133 83
Total	$ 89,958 76

There were 26 timber licenses current on April 30, 1928, being 5 less than the previous year, 4 having terminated, 4 relinquished, 1 cancelled and 4 new ones having been issued.

The expenditure for forest protection on Indian reserves during the year amounted to $8,312.78, of which $1,722.33 was used for extinguishing 15 forest fires, which, however, caused no appreciable damage.

Estimates of timber and reports on land were made of four reserves during the usual administrative work and this data has been added to the record of the timber resources of the Indians.

BUILDINGS

The following is a summary of the buildings erected in 1927-28.

Indian Residential Schools

Indian residential schools were erected at Lytton, B.C., Onion Lake, Sask., Kamsack, Sask., and a site was purchased for the new Indian residential school at Shubenacadie, N.S.

Day Schools

A large day school was erected at Caughnawaga, P.Q.

Water Supply Systems, Etc.

A water supply system was installed at the Guy Indian residential school, at Sturgeon Landing, Sask.

Minor alterations were carried out to buildings and mechanical plants at several Indian Residential Schools.

Hospitals

A new hospital was erected for the Indians at the Six Nations reserve.

Agents' Residences, Barns, Outbuildings

An agent's residence was erected at The Pas, and teachers' residence at St. Regis.

Outbuildings were built at Duck Lake, Sask., Fraser Lake, B.C., at the Coqualeetza Institute, Sardis, B.C. and a barn was erected at the Mohawk Institute, Brantford, Ont.

Additional houses were built for the Indians on the new reserve at Sydney, N.S.

SURVEYS

British Columbia

Babine Agency.—New reserves were surveyed as follows:—Kitwancool band, Nos. 1, 2 and 3. Andimaul Band, No. 1. Kispaix band, Nos. 4, 5, 6, 7, 8, 9 and 10. Hagwilget band, Nos. 17, 18, 19, 20, 21, 21A, 21B, 22, 22A, 23, 24, 25, 26, 27 & 28. Kitselas band, Nos. 4A. Resurveys were made of the following old reserves:—Kitwangar band, Nos. 4, 5, 6, 7 and 8. Kitsegukla band, No. 3.

Bella Coola Agency.—New reserves were surveyed as follows:—Kitimat band, Nos. 7, 9, 10, 11, 12, 13 and 14. Kitlope band, No. 4. Resurveys were made of the following old reserves:—Kitimat band, Nos. 6 and 8.

Lytton Agency.—(Railway belt).—New reserves were surveyed as follows:—Lytton band, Nos. 16A, 32 and 33. Pavilion band, No. 3A. Boothroyd band, Nos. 11, 12 and 13. Siska Flat band, No. 6 and addition to No. 5. Skuppah band, Nos. 3A and 4A. Spuzzum band, Nos. 1A, 2A, 3A, 4A, 5A, 7, 8, and 9. Boston Bar band, Nos. 1A, 8, 9, 10 and 11. Resurveys were made of Nanahout I.R. No. 1 for Lytton Bd. and 5A, Boothroyd Bd.

Skeena River Agency.—New reserves were surveyed as follows:—Tsimpsean Tribe. Port Simpson band, Nos. 32, 32A, 32B, 32C, 32D, 32E, 33, 33A, 34, 63, 64, 65, 66, 67, 68 and 69. Tsimpsean Tribe. Metlakatla band, Nos. 90, 91, 92 and 93. Kitkatla band, Nos. 19 and 19A. Kitkahta band, No. 3A, 7, 10, 12, 13.

Stuart Lake Agency.—New reserve was surveyed for the Cheslatta band, No. 1A.

Williams Lake Agency.—New reserves were surveyed as follows:—Nemaiah Valley band, Nos. 1A, 2A, 3 and 5. Canim Lake band, Nos. 3 and 5. Alkali Lake band, Nos. 9A, 11A, 16 and 18. Toosey band, No. 1A. Anaham band, No. 2A. Stone band, Nos. 1A, 3 and 4. Alexis Creek band, Nos. 1A, 2, 3 and 4.

Nova Scotia

Surveys were made of property purchased for Shubenacadie and Boat Harbour reserves.

New Brunswick

A survey was made of boundaries of Eel River Indian reserve.

Quebec

A number of additional lots were surveyed in the village of Caughnawaga.

Resurveys were made of a number of lots in the reserve survey and valuations were made in connection with the widening of the Châteauguay road and also surveys of the properties of the Roman Catholic church and the new school in the village of Caughnawaga.

Ontario

Surveys were made in connection with the following:—Subdivisions of a number of lots on Walpole Island; subdivision survey in connection with Indian holdings at Whitefish River Indian reserve.

Indian locations in the Rama Indian reserve. Island in the St. Lawrence River near Brockville. The West boundary of the Golden Lake Indian reserve.

Saskatchewan

Investigatory survey and selection of lands in connection with the Little Red River reserve.

Manitoba

Preliminary survey in connection with possible reclamation of lands in Peguis Indian reserve.

Investigations were made in connection with the hay supply of the reserves in the vicinity of Fairford.

BRIDGES—DRAINAGE—WATERWORKS AND IRRIGATION SYSTEMS, ALSO ROADS—DYKING AND WHARVES

The engineering works mentioned hereunder were carried out on different Indian reserves by the department during the current fiscal year.

Bridges

Repairs were made for the maintenance of bridges on the following reserves:—Lillooet, B.C.; Timiskaming, Que.; Manitoulin Island, Sarnia, and Walpole Island, Ont.; Pauls Reserve, Alta.; Salmon River, N.S.

Drainage Systems

Drainage systems were surveyed and constructed to improve cultivated land on the following reserve:—Cowichan, B.C.

Dyking

Dyking works were carried out for the protection of farming land and the maintenance of highways on the following reserves:—Saanich and Deadmans Creek, B.C.; Nyenza and Eskasoni, N.S.

Irrigation Systems

Irrigation systems have been constructed or improved on the following reserves in British Columbia to assist Indians in their farming operations, etc.:—Lytton, No. 9; Anaham, No. 1; Canim, No. 1; Boston Bar; Dog Creek; Lillooet, No. 4; Fountain, No. 3; William's Lake; Botanie Lake; Clinton; Pemberton; Neskainlith; Bridge River; Soda Creek.

Roads

Highways are gradually being constructed in co-operation with Provincial Department of Highways in Ontario and Quebec, and main roads improved on the following reserves:—

Province of Ontario.—Six Nations, Tyendinaga, Rama, Alnwick, Walpole Island, Muncey, Moravian, Oneida, Kettle Point and Stony Point, Golden Lake, Gibson, Sarnia, Cape Croker, New Credit, Fort William, Garden River, Sheshegwaning.

Province of Quebec.—Caughnawaga, Abenakis, Restigouche, Oka, Lorette, Maniwaki, St. Regis, Ouiatchouan, Doncaster, Maria.

Province of New Brunswick.—Burnt Church.

Province of Nova Scotia.—Nyenza, Eskasoni, Salmon River, Whycocomagh, Malagawatch.

Province of Prince Edward Island.—Lennox Island.

Province of Saskatchewan.—Ochapowace and Stony Reserves.

Province of Alberta.—Paul's Reserve.

Province of British Columbia.—Lillooet, Lytton, Nanaimo, Squamish.

Sewerage Systems

Sewage disposal systems were installed in connection with the following Indian village:—*Holmoca, B.C.*

Another section of the sewerage system, started last year on Abenakis reserve at Odonak, was continued this year.

Water Works Systems

Water supply systems were installed to provide the following Indian villages and Indian residential schools with pure water for domestic purposes and fire protection:—Bella Bella, Holmoca, Chekwelp, St. Mary Res. School, B.C., Duck Lake Residential School, Sask.

Wharves

Wharves were reconstructed and repaired at Bella Bella, Klemtu, Kincolith, B.C. and at Norway House, Man.

SUMMARY OF INDIAN AFFAIRS IN THE VARIOUS PROVINCES BASED ON THE REPORT OF THE DEPARTMENTS' AGENTS AND THE INSPECTORS FOR THE FISCAL YEAR ENDED MARCH 31, 1927.

The local administration of the Indian lands, on the reserves scattered throughout the Dominion, is conducted through the department's agencies of which there are in all 111. The number of bands included in an agency varies from one to more than thirty. The staff of an agency usually includes various officers in addition to the agent, such as the medical officer, clerk, farm instructor, field matron, nurse, constable, stockman, etc., according to the special requirements of the agency in question. At many of the smaller agencies in the older provinces, where the Indians are more advanced, the work is comparatively light, requiring only the services of an agent. The work of the agencies is supervised by the department's inspectors, each inspector having charge of a certain number of agencies.

Ontario

Agencies.—The following agencies are included in the province of Ontario: Alnwick, Bay of Quinte, Cape Croker, Chapleau, Chippewas, Munsees, and Oneidas of the Thames, Christian Island, Fort Frances, Georgian and Snake Islands, Golden Lake, Gore Bay, Kenora, Lake Superior (Eastern and Western Divisions), Manitowaning, Missisaguas of the Credit, Moravians of the Thames, Parry Sound, Rama, Rice and Mud Lakes, Sarnia, Saugeen, Scugog, Six Nations, Sturgeon Falls, Thessalon and Walpole Island.

Tribal Origin.—The great majority of the Indians of Ontario are Ojibwas, and are of Algonkin stock. The Oneidas of the Thames, the Mohawks of the Bay of Quinte, the Mohawks of the Parry Sound district, and the Six Nations of Brantford are of Iroquoian stock. There is a band of Pottawattamies at Walpole island, and Delawares at the Caradoc agency; these are of Algonkin stock.

Occupations.—The Indians in the western and central parts of Ontario engage largely in farming. The reserves generally are well suited to this purpose and the activity of the department's field agents has resulted in a steady improvement both in the methods of operation and the results achieved. The success achieved by the returned soldiers of this province has been especially creditable and they are rapidly developing prosperous communities.

During the summer months Indians find a profitable source of income as guides and canoe-men. Many are employed at various industries and trades, while railway and navigation companies employ a large number. As a rule they are excellent bushmen and many find employment in the various lumber camps. There is still an excellent market for showshoes, canoes and moccasins, and these are usually manufactured by the other members of the community.

The women also have many sources of income; some are employed as domestics; others support themselves by making baskets and fancy work. In certain districts berry-picking is an important item and furnishes considerable income.

Dwellings.—A great majority of the Ontario Indians have comfortable farmhouses which compare very favourably with those of their white neighbours. Many own houses of brick and stone, but in the outlying and more remote districts the old log houses are in the majority. In the more settled districts the Indians have followed the examples of the whites and both houses and farm buildings are comfortable and of excellent construction.

New Ontario.—In the remote parts of Ontario hunting and fishing are still the chief sources of livelihood. While fur has been very scarce the price has been correspondingly high. Fishing, however, has not been as successful this year owing to the scarcity of the market and the low prices. Acting as guides and canoe-men during the summer months adds considerably to their income. While agriculture is not carried on to any extent, most of the bands grow considerable crops of potatoes and vegetables. They are, of necessity, more or less nomadic and consequently live in tents most of the year. This condition will greatly change as civilization progresses.

Quebec

Agencies.—The following agencies are included in the province of Quebec: Becancour, Bersimis, Caughnawaga, Lake St. John, Lorette, Maria, Mingan, Oka, River Desert, Restigouche, Seven Islands, St. Regis, Temiskaming and Viger and Abenakis of St. Francis, Gaspe.

Tribal Origin.—The principal tribes found in Quebec are: Iroquois at Caughnawaga, Lake of the Two Mountains, and St. Regis; the Hurons of Lorette are also of Iroquoian stock; the Montagnais, who are also of Algonkin stock, at Bersimis, Mingan, Lake St. John, Seven Islands; the Abenakis, also of Algonkin stock, at Becancour and St. Francis; the Micmacs, also of Algonkin stock, at Maria and Restigouche; and the Malecites, also of Algonkin stock, at Viger.

In the agricultural districts of the province the Indians are developing a keener interest in farming operations and are making a decided success. In the Gaspe peninsula the Indians find employment in the lumber camps and mills, but on the north shore of the gulf, fishing, hunting and trapping are still the principal sources of income. In the northern part of the province lumbering is the chief pursuit. One of the principal industries of the Indians of Quebec is making baskets, and many of the Indians spend the summer months at the resorts in order to dispose of the baskets, lacrosse sticks, racquets, moccasins, etc., to the tourists. Some of them, particularly in the Saguenay district, act as guides and canoe-men.

Dwellings.—In the older settled districts of the province the Indians own many excellent stone and brick houses. Generally speaking, the buildings are almost all of good construction, comfortable and sanitary. In the more remote districts, where hunting and trapping are still the principal occupations, the Indians necessarily live in tents during the greater part of the year.

The North Shore.—Along the north shore of the gulf of St. Lawrence, the Indians have been taking a marked interest in the fishing industry. At Mingan, Natashkwan, Romaine, St. Augustine, and Moisie, the fishing is under departmental supervision. Salmon and cod are the principal marketable fish, and are a source of considerable income to the Indians. The land is not suitable for extensive cultivation, but many of the Indians have very creditable gardens.

New Brunswick

Agencies.—There are three agencies in the province of New Brunswick, the Northeastern located at Buctouche, the Northern located at Perth, and the Southwestern located at Fredericton.

Tribal Origin.—The majority of the Indians of New Brunswick belong to the Micmac race, which is of Algonkin stock. In addition to these there are some bands of Malecites, also of Algonkin stock.

Occupations.—In the Northeast division the Indians are mostly engaged in fishing, hunting and trapping. Some farming is carried on, and the Indians have rather tended to increase their interest in this regard.

The lumbering industry employs quite a large number and the Indians all through the eastern provinces have become very proficient in the lumber camps, on the river drives and in the mills. In the Northern division there is less farming carried on, and the Indians during the summer months find employment generally as day labourers. In the Southern division they support themselves chiefly by the manufacture and sale of Indian wares.

Nova Scotia

Agencies.—There are nineteen Indian agencies in the province of Nova Scotia, namely: Yarmouth, Digby, Shelburne, Queens, Lunenburg, Annapolis, Kings, Windsor, Shubenacadie, Halifax, Cumberland, Colchester, Pictou, Antigonish-Guysboro, Richmond, Inverness, Victoria, Sydney, and Eskasoni.

Tribal Origin.—The Indians of Nova Scotia are of Algonkin stock, and bear the distinctive name of Micmac.

Occupations.—They follow various occupations, but, as a rule, do not confine themselves to any particular one. Many of them cultivate the land with indifferent success, but as there are exceptions in almost every case, so it is with our Indians; a few of them are succeeding very well as farmers. The majority of those living near industrial centres usually work as day labourers. Hunting, trapping, and acting as guides for sportsmen are favourite occupations, more especially with Indians of middle age. Basket-making and the manufacture of fancy moccasins, etc., are confined mostly to women. A profitable employment among Indians in a few sections of Nova Scotia is the manufacture of hockey sticks, and they appear to be experts at the business.

Dwellings.—With very few exceptions, Indians in Nova Scotia occupy houses of frame construction, well finished on the outside, but unfinished inside. Every settlement, however, has a few comfortable dwellings well finished throughout. Other buildings owned by Indians—barns and storehouses—are mostly of frame construction also.

Prince Edward Island

Agency.—One agency is sufficient for the purposes of the department in this province, as the total Indian population is only 292.

Tribal Origin.—The Indians of this province all belong to the Micmac tribe, which is of Algonkin stock.

Occupations.—But few of the Indians of Prince Edward Island are farmers. The principal industries are basket-making and fishing. The oyster fisheries, which had been a complete failure for some years, are again profitable and have added somewhat to the income of the Indians.

Manitoba

Agencies.—The following agencies are included in the province of Manitoba: Fisher River, Clandeboye, Norway House, Griswold, Portage la Prairie and Manitowapah, Pas and Birtle.

Tribal Origin.—The majority of the Indians of Manitoba belong to the Ojibewa race, which is of Algonkin stock. Bands of Swampy Crees are found at the Norway House and Fisher River agencies and in the York factory district; these are also of Algonkin stock. The Indians located at the Griswold agency are Sioux; there are also Sioux at the Birtle and Portage la Prairie agencies. There is a band of Chipewyans at Fort Churchill; this tribe is of Athapascan stock.

Occupations.—The reserves in Manitoba suitable for extensive agriculture are mainly within the Birtle, Griswold, and Portage la Prairie agencies. On some reserves during the last two years the crops have not been up to the standard and the Indians have somewhat lost heart in their farming operations, but generally speaking progress has been satisfactory.

In the northern agencies the occupations are mostly hunting and trapping, but fishing has been becoming a more and more important factor during the past four or five years, and considerable income has been derived therefrom. While fur has been scarce the price has been high and the market for fish has increased. All of the northern Indians are expert guides and canoe-men, and many find employment in this way or with the transport or fur companies.

In the southern and more settled districts many of the younger people seek employment as day labourers, and owing to the high wages have been fairly prosperous. The Indian women make needle work, baskets, etc., for which there is a ready market.

Dwellings.—In recent years the Indians have adopted more sanitary methods of living. Their houses are more comfortably furnished and of better construction than formerly. In the north the nomadic life of the Indians does not permit of other than the old-fashioned log house, but even these are being greatly improved and in some cases are being replaced by suitable frame dwellings.

Saskatchewan

Agencies.—The following agencies are included in the province of Saskatchewan: Assiniboine, Battleford, Carlton, Crooked Lake, Duck Lake, Moose Mountain, Onion Lake, Pelly, Qu'Appelle and Touchwood Hills, File Hills and Isle à la Crosse.

Tribal Origin.—The most numerous tribes among the Saskatchewan Indians are the Ojibewas, Swampy Crees and Plain Crees, which all belong to the great Algonkin stock. In addition to these, Sioux Indians are found at the Assiniboine, Moose Mountain, Qu'Appelle and Carlton agencies, and on the Moose Woods reserve. In the Onion Lake agency there is a band of Chipewyans, who are of Athapascan stock. There are also a few Chipewyan Indians in the Isle à la Crosse district.

The principal occupation of the Indians of Saskatchewan is mixed farming and stock-raising. The close supervision which the department has had over these Indians has tended to greatly improve their method of farming and consequently their crops and income derived from them have greatly increased. Most of the Indians are well provided with good quality of machinery. As a

rule they have good stock and suitable houses. In the outlying districts, however, hunting and trapping are still the main sources of income and will so remain until civilization encroaches upon the hunting grounds.

Dwellings.—The dwellings of the Indians on the reserves where farming is carried on are now mostly of frame construction. The outbuildings, however, are generally of logs, but even there there has been some improvement.

Alberta

Agencies.—The following agencies are included in the Province of Alberta: Blackfoot, Blood, Edmonton, Hobbema, Peigan, Saddle Lake, Sarcee, Stony and Lesser Slave Lake.

Tribal Origin.—The Alberta Indians are of Algonkin stock, with the exception of the Sarcees near Calgary and the Beavers and Slaves in the Lesser Slave Lake agency, who are Athapascan, and the Paul's band in the Edmonton agency, who are Iroquoian, and the Stonies, who are of Siouan stock. The Algonkin Indians of Alberta are subdivided into Blackfoot nation, comprising the Indians of the Blackfoot, Blood and Peigan agencies, Plain Crees found in the Lesser Slave Lake, Saddle Lake, and Hobbema agencies, and a band of Ojibewas at Moberly Lake, in the Lesser Slave Lake agency.

The principal occupations of the Indians of Alberta are farming and stock-raising. Almost all the reserves in the settled districts of the province have large herds of horses and cattle.

In the northern parts of the province hunting and trapping are still almost the sole sources of income; there is practically no farming carried on and the construction of steamers on the Peace and Athabasca rivers, and of the railways to Peace River Crossing and Fort McMurray, have greatly lessened the wages of the Indians with the trading companies and transports. However, the price of fur has been even higher than in past years.

Dwellings.—In the southern part of the province the dwellings and farm buildings are of excellent construction and quality. Almost all the reserve where extensive farming is carried on boast of up-to-date modern dwellings, comfortable and well constructed. In the northern parts of the province the majority of the Indians continue to follow their primitive nomadic mode of life, and many of them still live in tents and tepees during the greater part of the year.

British Columbia

Agencies.—The following agencies are included in the Province of British Columbia: Babine and Upper Skeena, Bella Coola, Cowichan, Kamloops, Kootenay, Kwawkewlth, Lytton, New Westminster, Okanagan, Queen Charlotte, Stikine, Stuart Lake, Vancouver, West Coast, Williams Lake and Skeena River.

Tribal Origin.—The Indians of the Bella Coola, Cowichan, Kamloops, Lytton, New Westminster, Vancouver, and Okanagan agencies belong to the Salish tribe. The Kootenay tribe is located in the agency of the same name. The Kwakiutl-Nootka tribe is located at the Kwawkewlth and West Coast agencies; the Haidas, in the Queen Charlotte islands; the Tlingits, in the Stikine; and the Tsimshians, in the Skeena River agency. The Indians of the Babine, Stuart Lake and Williams Lake agencies belong to the Athapascan race.

In addition to these there are about 3,000 nomadic Indians in the province who cannot be correctly classified according to linguistic stock or tribal origin.

Occupations.—The occupations of the Indians of British Columbia vary with their habitat. The Indians situated along the coast earn their livelihood principally by fishing. In many instances they own their own motor-launches,

nets and gear, while others are supplied by the various canneries. Many of the women are also employed in the canneries or in the hop fields, and make a very steady income.

The Indians of the Queen Charlotte islands own and operate their own small plant for rendering the oolachan or candle fish. In the inland parts of the province some farming operations are carried on and particularly in the irrigated districts grain, fruits of all kinds, and vegetables have been raised with success.

These Indians have been making marked progress in this regard and are now well equipped with modern machinery.

The Kootenay, Kamloops, Okanagan and New Westminster Indians own large herds of horses and cattle. While the Indians in the northern and remote parts of the province still depend upon hunting and trapping for their livelihood, the agents report a marked improvement in their manner of living.

Dwellings.—Except for the more remote districts the Indians have built comfortable and modern dwellings and outbuildings. Their progress in this respect has been perhaps more rapid than that of any other Indians of the Dominion.

Northwest Territories

Agencies.—The department has now three agencies in the Northwest Territories, namely, Fort Simpson, Fort Smith, and Fort Resolution.

Tribal Origin.—The principal tribes found in the Far North are the Slave, Hares, Loucheux, Sicannies, Dogribs, Yellow-knives, Chipewyans and Caribou Eaters. All these tribes are of Athapascan stock. There are a few Crees in the neighbourhood of Chipewyan. These are of Algonkin stock. The most northerly tribes are the Takudah, who extend to the Mackenzie Delta; and the Copper Mines, who are located along the Coppermine river. The territory occupied by these two last-mentioned tribes is contiguous to that inhabited by the Eskimos.

These Indians depend entirely upon hunting and trapping for a livelihood. The department in 1921 made a treaty with the Indians along the Mackenzie river thus bringing under the supervision of the Dominion Government practically the only Indians in Canada with whom treat had not been made.

Occupations.—A few have been induced to raise small plots of potatoes. They own no horses or cattle, transportation being almost entirely by canoe along the great waterways, or by dogs in winter. They catch and preserve large quantities of whitefish for their own use and for consumption by their dog-trains in winter.

Yukon

Tribal Origin.—The Forty Mile, Blackstone, and Moosehide bands belong to the Takudah tribe. There is a band of Slavies at Lancing Creek who migrated from Fort Good Hope, on the Mackenzie river; another band of Slavies, called Nahanies, is located at the headwaters of the Pelly river. All these Indians are of Athapascan stock. At Mayo, Selkirk, Little Salmon and Carmacks there are bands belonging to the tribe known as Stick Indians. Bands belonging to the Tlingit tribe are found at Whitehorse, Teslin Lake, Champagne Landing, and Carcross.

Occupations.—Hunting, trapping and fishing are the chief occupations of the Yukon Indians, and they have been fairly successful during the past year. The women also derive some revenue from the sale of mocassins and curios of various kinds, while the men are expert at making tobogans and snowshoes. Practically no farming is carried on owing to climatic conditions, but some of the Indians cultivate patches of potatoes and other vegetables.

FINANCIAL

At the close of the twelve months ended March 31, 1928, capital of the Indian Trust Fund, which at the end of the preceding year amounted to $12,860,953.69, had increased to $13,203,366.84.

The amounts expended from the Consolidated Revenue Fund were as follows: Voted by Parliament for the purposes of the department, $3,977,791.58, and annuities by statute, $220,209.00.

On March 31, 1928, the balance to the credit of the Indian Savings Account for the funding of the annuities and earnings of pupils at industrial schools was $206,977.98. Deposits and interest during the twelve months aggregated $37,456.53, and withdrawals, $37,042.14.

GENERAL

In 1924 a complete census was made by the department of the Indians and Eskimos of Canada, which was published in the annual report. This was the first census that had been made since 1916 and it shows slight increase in the Indian population as compared with previous records. A recapitulation of this census will be found in Part II of this report, which follows herewith and therein also will be found statistics with regard to Grain, Vegetable and Root Production; Land, Private and Public Buildings and Property; Live Stock and Poultry; General Effects; Value of Real and Personal Property and Progress during year; Sources and Value of Income; Schools; Indian Land; Civil Government; Appropriation Accounts and Indian Trust Fund.

I have the honour to be, sir,

Your obedient servant,

DUNCAN C. SCOTT,
Deputy Superintendent General of Indian Affairs.

PART II

TABULAR STATEMENTS

TABLE No. 1.—RECAPITULATION: CENSUS OF INDIANS AND ESKIMOS ARRANGED UNDER DEPARTMENT INSPECTORATES AND DISTRICTS

Inspectorates and Districts	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upwards	
		Anglican	Baptist	Methodist	Presbyterian	Roman Catholic	Other Christian beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Alberta Inspectorate	5,354	1,006	.....	1,371	.....	2,676	.....	301	446	520	559	549	315	273	1,204	1,181	136	171
British Columbia Inspectorates	23,782	4,640	.....	3,840	459	11,373	500	470	1,617	1,732	2,339	2,227	1,016	998	5,132	4,877	668	676
Manitoba Inspectorates	15,466	5,706	51	3,702	812	2,761	146	2,288	1,488	1,476	1,664	1,686	1,052	838	3,041	3,285	370	566
New Brunswick Inspectorate	1,606	.....	.....	.....	.....	1,606	.....	.....	113	149	191	165	108	110	366	324	46	34
Nova Scotia Inspectorate	1,827	2	7	.....	.....	1,818	.....	.....	150	149	213	204	108	95	421	363	61	63
Ontario Inspectorate	20,429	5,231	1,115	4,517	9	6,710	540	954	1,325	1,261	1,907	1,933	1,238	1,237	4,472	4,471	590	642
Prince Edward Inspectorate	315	.....	.....	.....	.....	315	.....	.....	28	30	34	34	25	17	64	62	11	10
Quebec Inspectorate	13,191	101	.....	441	.....	9,067	20	.....	625	681	998	1,030	547	574	2,122	2,111	325	352
Saskatchewan Inspectorates	8,059	2,233	.....	59	895	3,511	21	1,340	727	735	975	911	356	332	1,651	1,755	264	353
Treaty No. 8 Inspectorate	5,782	350	.....	.....	.....	4,701	.....	731	524	525	757	788	386	354	1,094	1,272	38	44
Treaty No. 9 Inspectorate	2,777	1,857	.....	.....	.....	858	.....	62	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Isle à la Crosse District	2,210	748	.....	.....	.....	1,462	.....	.....	248	251	221	225	151	152	297	404	105	156
Treaty No. 11 Inspectorate	2,640	463	.....	.....	.....	1,677	.....	.....	177	162	298	258	114	121	455	532	9	14
Yukon	1,456	1,220	.....	.....	.....	136	.....	.....	128	140	125	128	81	80	295	230	23	24
Total Indian Population	104,894	23,557	1,173	13,930	2,175	48,671	1,227	6,146	7,596	7,811	10,281	10,138	5,497	5,181	20,614	20,867	2,646	3,105

No information available as to ages of 11,158 Indians or as to religions of 8,015 Indians.

Eskimos	
Northwest Territories—	
Alaska Boundary and East to Kent Peninsula	1,220
From Mouth of Backs River and East to Wager River	525
Igloolik Islands (approx.)	185
From Melville Peninsula to Fullerton	294
From Chesterfield Inlet to Churchill	664
Total	2,888
Baffin Land—	
North Coast	100
South Coast	870
Cumberland Sound	426
Total	1,396
Ungava (Quebec)—	
From Great Whale River (East Coast Hudson's Bay) to Port Burwell (Hudson's Strait)	900
Labrador	1,000
Total Eskimos[1]	6,184
Total number of Indians and Eskimos	111,078

[1] No details of religions or ages of 6,184 Eskimos available.

NOTE.—The Department of Indian Affairs is indebted to Dr. Knud Rasmussen, Copenhagen, Denmark, and to the Royal Canadian Mounted Police, for the revised Census Statistics regarding the Eskimos of Canada.

TABLE No. 1.—RECAPITULATION: CENSUS OF INDIANS AND ESKIMOS ARRANGED UNDER PROVINCES AND DISTRICTS

Provinces and Districts	Number in Band	Religions							Under 6 years		From 6 to 15 inclusive		From 16 to 20 inclusive		From 21 to 65 inclusive		From 65 years upward	
		Anglican	Baptist	Methodist	Presbyterian	Roman Catholic	Other Christian Beliefs	Aboriginal Beliefs	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Alberta	8,990	1,355	.....	1,371	.....	5,733	.....	531	762	854	1,086	1,070	539	478	1,870	1,973	159	199
British Columbia	24,316	4,640	.....	3,840	459	11,764	500	613	1,663	1,775	2,410	2,297	1,062	1,046	5,215	4,994	675	679
Manitoba	11,673	4,459	51	3,445	731	2,300	146	541	1,140	1,129	1,234	1,260	846	669	2,238	2,417	294	446
New Brunswick	1,606	.....	.....	.....	.....	1,606	.....	.....	113	149	191	165	108	110	366	324	46	34
Northwest Territories	4,543	513	.....	.....	.....	3,171	.....	359	365	333	496	490	247	233	861	955	24	39
Nova Scotia	1,827	2	7	.....	.....	1,818	.....	.....	150	149	213	204	108	95	421	363	61	63
Ontario	26,706	7,988	1,115	4,774	116	8,054	540	2,766	1,643	1,582	2,306	2,329	1,428	1,390	5,211	5,273	663	751
Prince Edward Island	315	.....	.....	.....	.....	315	.....	.....	28	30	34	34	25	17	64	62	11	10
Quebec	13,191	101	.....	441	.....	9,067	20	.....	625	681	998	1,030	547	574	2,122	2,111	325	352
Saskatchewan	10,271	3,279	.....	59	869	4,707	21	1,336	979	989	1,188	1,131	506	489	1,951	2,165	365	508
Yukon	1,456	1,220	.....	.....	.....	136	.....	.....	128	140	125	128	81	80	295	230	23	21
Total Indian Population	104,894	23,557	1,173	13,930	2,175	48,671	1,227	6,146	7,596	7,811	10,281	10,138	5,497	5,181	20,614	20,867	2,646	3,105

No information available as to ages of 11,158 Indians or as to religions of 8,015 Indians.

Eskimos	
Northwest Territories—	
Alaska Boundary and East to Kent Peninsula	1,220
From Mouth of Backs River and East to Wager River	525
Igloolik Islands (approx.)	185
From Melville Peninsula to Fullerton	294
From Chesterfield Inlet to Churchill	664
Total	2,888
Baffin Land—	
North Coast	100
South Coast	870
Cumberland Sound	426
Total	1,396
Ungava (Quebec)—	
From Great Whale River (East Coast Hudson's Bay) to Port Burwell (Hudson's Strait)	900
Labrador	1,000
Total Eskimos[1]	6,184
Total number of Indians and Eskimos	111,078

[1] No details of religions or ages of 6,184 Eskimos available.

NOTE.—The Department of Indian Affairs is indebted to Dr. Knud Rasmussen, Copenhagen, Denmark, and to the Royal Canadian Mounted Police, for the revised Census Statistics regarding the Eskimos of Canada.

TABLE No. 2—GRAIN, VEGETABLE AND ROOT PRODUCTION

Agencies	Wheat		Oats		Other Grains		Peas, Beans, Etc.		Potatoes		Other Roots		Fodder Tons		
	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Hay Cultivated	Hay Wild	Other Fodder
Alberta															
Blackfoot	4,963	136,442	1,425	34,191	26	864			20	1,225				613	1,656
Blood	9,788	77,745	847	2,482					5	350				1,500	500
Edmonton	1,231	30,237	1,613	37,594	525	14,309			19	992	7	241		2,320	599
Hobbema	1,636	31,302	2,049	55,079	316	7,111			28	1,423	20	323	354	4,735	6,021
Lesser Slave Lake	30	650	155	4,300					71	6,655	2	230		2,130	639
Peigan	1,595	32,736	257	405										851	200
Saddle Lake	587	13,306	722	26,719	7				12	1,077	11	331		3,455	71
Sarcee	†50		†529						8	215	4	70		313	*490
Stony									10	150	10	175	250	1,080	
Total	19,880	322,418	7,597	160,770	870	22,284			173	12,087	54	1,370	604	16,997	10,170
British Columbia															
Babine			81	226					103	13,550	55	8,290	1,061	550	226
Bella Coola									12	1,275	1	75	55	470	
Cowichan	51	1,630	423	16,905					271	6,535			1,532		
Kamloops	345	5,200	870	18,380	19	350			743	7,530	90	1,320	5,280	845	80
Kootenay															
Kwawkewlth															
Lytton	122	2,770	170	4,535	24	610	220	4,260	202	41,610	19	435	868	2	
New Westminster	10	270	357	19,700	13	380	78	1,520	175	13,920	39	2,555	615	437	
Okanagan	1,185	23,820	465	8,050	135	2,510	130	2,600	265	26,500	165	22,000	2,400	1,275	180
Queen Charlotte									13	305	2	15	3	1	
Skeena River			*3				6	495	212	20,650	15	1,365	16	48	
Stikine									1	30				62	
Stuart Lake	13	210	285	3,500	16	250			46	4,428	20	2,195	522	2,100	458
Vancouver					12	480	32	1,170	51	6,140	5	650	100	70	
West Coast			6		16		3	103	5	347	3	173	37		
Williams Lake	109	2,110	315	7,150					281	11,530	65	Gardens	1,620	4,230	
Total	1,835	36,010	2,975	78,446	235	4,580	469	10,148	2,380	154,350	479	39,073	14,109	10,090	944
Manitoba															
Birtle	462	5,835	796	8,493	228	2,688			11	1,735				2,330	47
Clandeboye			123	2,350					73	7,300	26	1,300		1,433	
Fisher River			99	1,322	61	692			23	4,274	9	627	27	4,161	64
Griswold	610	7,558	533	3,328	1,183	18,512	15	654	15	1,620				1,260	194
Manitowapah									74	5,615		321		7,211	6
Norway House									70	4,050	1	80		175	
Pas							67	2,380						1,985	
Portage la Prairie	535	6,155	666	3,369	1,320	23,027		15	17	687				682	324
Total	1,607	19,548	2,217	18,862	2,792	44,919	82	3,049	283	25,281	36	2,328	27	19,237	635

†Not Threshed. *Cut green.

New Brunswick															
Northern Division			19	130	4	30	1	4	4	125	3	113			
Northeastern Division	7	77	88	1,305	10	117	3	32	54	2,750	10	1,300	112	25	9
Southwestern Division			2	50	1	30	2	40	9	545	1	25	8		
Total	7	77	109	1,485	15	177	6	76	67	3,420	14	1,438	120	25	9
Northwest Territories															
Fort Resolution									½	10					
Nova Scotia															
Annapolis							1	15	3	200	1	14	3		
Antigonish and Guysboro	1	19	4	100			2	37	7	303	4	73	39	8	5
Cape Breton (Eskasoni)			5	40	3	25	1	45	10	300	1	20	60	20	10
Cape Breton (Sydney)															
Colchester			*1				*½		2	250	½	10	5		
Cumberland			2	30			*½		½	75			3	4	
Digby									3	80			5		
Halifax			10	380			1	4	15	370	3	155	27	15	5
Hants (Indian Brook)			2				½		4	90	1	29	20	8	
Hants (Windsor)							1	10	2	100	1	10	10		
Inverness			5	175					11	550			15	66	9
Kings			1	20	1	10	½	2	2	60	1	50	5	5	
Lunenburg							2	11	10	450	13	50	35	20	
Pictou			1	10			1	3	8	522	1	42		1	
Queens							½	4	½	10			5		
Richmond			23	400			2	35	12	425	1	35	43	3	
Shelburne							½	3	½	100	½	50	2		
Victoria			2	30			½	2	12	160	½	2	85	10	3
Yarmouth															
Total	1	19	56	1,185	4	35	14	171	102½	4,045	28½	540	362	160	32
Ontario															
Alnwick	12	285	193	4,075	11	285	10	200	15	1,160	4	1,000	130		
Cape Croker	25	310	235	2,436	39	560	22	342	25	1,648	12	236	340	80	6
Caradoc	315	8,475	1,375	34,375	850	25,000	185	4,625	745	29,800	395	13,825	4,150	80	1,500
Chapleau			11	770											
Christian Island			85	1,700	2	20	22	220	30	1,300	6	250	120		
Fort Frances	5	110	98	145	24	6			31	1,255	3	165	587	91	113
Fort William									59	2,238			25	12	
Georgina Island	17	275	64	1,150	6	80			7	140			55	20	3
Golden Lake	4	50	10	150			2	20	6	200			10	20	10
Gore Bay	11	* 220	132	5,595	26	440	39	705	76	3,225	16	980	315	7	135
Kenora									64	4,700	14	290	10	305	
Manitowaning	246	1,150	508	8,420	127	1,235	130	930	551	3,175	97	765	3,935	155	281
Moravian	100	1,100	180	2,000	200	2,800	18	200	28	650	12	240	180	40	210
New Credit	79	920	475	11,875	253	4,370	4	60	5	340			540		72
Parry Sound			62	1,215	19	190	6	165	38	685	9	315	380	12	
Rama	11	220	41	1,230	4	96	5	125	25	500	1	50	140	15	5
Rice Lake	70	2,200	255	7,900	46	1,300	10	245	42	3,350	30	5,250	200	20	70

*Cut green.

TABLE No. 2—GRAIN, VEGETABLE AND ROOT PRODUCTION—*Concluded*

Agencies	Wheat		Oats		Other Grains		Peas, Beans, Etc.		Potatoes		Other Roots		Fodder Tons		
	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Acres Sown	Bushels Harvested	Hay Cultivated	Hay Wild	Other Fodder
ONTARIO—*Concluded*															
Sarnia	270	5,175	995	31,000	125	2,270	55	440	185	14,300	43	1,780	118	300	55
Saugeen	8	120	260	9,100	32	485	14	382	78	2,850	18	265	170	8	120
Sault Ste. Marie	5	60	125	4,600			21	245	122	5,680	15	560	110	160	
Savanne									34	2,450	13	265		18	
Seugog									3	150					
Six Nations	1,100	15,600	6,300	126,000	1,420	24,300	45	820	90	3,000	520	7,400	2,900		7,500
Sturgeon Falls			40	400	15	450	7	175	20	2,000	9	240	30	25	
Thessalon			77	346			23	230	89	3,050	4	170	140	58	
Tyendinaga	50	1,000	1,550	46,500	1,000	25,000	75	1,500	50	2,000	4	600	4,000	15	4,000
Total	2,328	37,270	13,071	300,982	4,199	88,887	693	11,629	2,418	89,846	1,225	34,646	18,585	1,441	14,080
PRINCE EDWARD ISLAND	12	144	38	750					15	550			70	35	
QUEBEC															
Bécancour			8	190			2	158					13		
Bersimis	1	8	8	48	2	10	2	12	9	395	1	5	85		
Cacouna															
Caughnawaga	7	100	475	7,000	150	2,000	15	90	350	6,000	15	400	1,200		
Jeune Lorette															
Maniwaki	3	30	179	2,920	2	36	2	21	31	2,288	7	908	339	22	90
Maria	2	24	30	120					6	180	1	54	10		
Mingan															
Oka	25	300	125	3,000	50	500	15	400	30	500			300	20	175
Pierreville			30	300	10	160	3	20	35	200			50	75	
Pointe Bleue	61	640	600	6,000	290	2,600	50	700	275	6,900	20	200	500		80
Restigouche			190	1,900	5	50			40	2,400			5	45	
Seven Islands															
St. Regis	132	2,025	460	7,080	60	500	67	850	325	5,200	27	1,210	440	472	680
Timiskaming	16	150	140	3,000	3	75	2	20	12	1,200	1	50	150		60
Total	247	3,277	2,245	31,558	572	5,931	158	2,271	1,113	25,263	72	2,827	3,092	634	1,085
SASKATCHEWAN															
Assiniboine	596	6,557	93	2,163	3	80			5	455	1	57		870	191
Battleford	2,264	38,600	1,512	26,450	53	1,430			29	1,659	16	490		2,310	694
Carlton	2,302	48,433	1,156	38,261	52	1,656			20	2,205	10	415		4,511	850
Crooked Lakes	1,188	17,298	1,363	14,280	507	8,982			12	414	7	170		2,082	472
Duck Lake	1,401	26,767	730	23,879	27	821			9	840				3,909	207
File Hills Agency	201	2,764	203	3,245	125	2,704			3	345				599	32
File Hills Colony	937	11,810	1,166	15,344	587	13,396			6	1,135				282	186

Isle a la Crosse															
Moose Mountain	272	2,616	332	*	61	1,120				470		300		390	60
Moose Woods	15	194	43	500					4	118				904	100
Onion Lake	617	12,376	928	29,328	7	90			23	2,134	3	457		3,788	223
Pelly	743	11,873	1,225	25,790			1	25	6	590				1,604	241
Qu'Appelle	3,402	68,190	1,495	16,598	52	1,353			29	5,425	16	116		1,916	876
Touchwood	1,825	35,153	1,023	19,375	5	63			17	1,073	14	345		1,896	468
Wood Mountain Reserve	84	890	40		*50				1	25				77	
Total	15,847	283,021	11,309	215,213	1,529	31,695	1	25	164	16,888	67	2,350		25,138	4,600
YUKON TERRITORY															
Yukon									1	100	¼	50		10	

*Cut green—Rust.

RECAPITULATION

PROVINCES															
Alberta	19,880	322,418	7,597	160,770	870	22,284			173	12,087	54	1,370	604	16,997	10,170
British Columbia	1,835	36,010	2,975	78,446	235	4,580	469	10,148	2,380	154,350	479	39,073	14,109	10,090	944
Manitoba	1,607	19,548	2,217	18,862	2,792	44,919	82	3,049	283	25,281	36	2,328	27	19,237	635
New Brunswick	7	77	109	1,485	15	177	6	76	67	3,420	14	1,438	120	25	9
Northwest Territories									½	10					
Nova Scotia	1	19	56	1,185	4	35	14	171	102¼	4,045	28¾	540	362	160	32
Ontario	2,328	37,270	13,071	300,982	4,199	88,887	693	11,629	2,418	89,846	1,225	34,646	18,585	1,441	14,080
Prince Edward Island	12	144	38	750					15	550			70	35	
Quebec	247	3,277	2,245	31,558	572	5,931	158	2,271	1,113	25,263	72	2,827	3,092	634	1,085
Saskatchewan	15,847	283,021	11,309	215,213	1,529	31,695	1	25	164	16,888	67	2,350		25,138	4,600
Yukon Territory									1	100	¼	50		10	
Total	41,764	701,784	40,617	809,251	10,216	198,508	1,423	27,369	6,716¾	331,840	1,975¾	84,622	36,969	73,767	31,555

Table No. 3.—LAND: PRIVATE AND PUBLIC BUILDINGS AND PROPERTY

Agencies	Total Area of Reserve (Acres)	Acres under Wood	Acres Cleared but not Cultivated	Acres under Actual Cultivation	Acres Fenced	Private Property								Public Property					
						Stone, Brick and Frame Dwellings	Other Dwellings	Outbuildings, etc.	Ploughs, Harrows, Drills, etc.	Mowers, Reapers, Binders, Threshers, etc.	Carts, Wagons and Vehicles	Automobiles	Tools and small Implements	Churches	Council Houses	School Houses	Saw Mills	Other Buildings	Engines and Machinery
Alberta																			
Blackfoot	175,580	2,548	141,582	31,450	68,396	153	92	623	560	320	340	8	640	2	1	2	.....	22	195
Blood	354,086	4,700	330,353	19,033	79,800	95	320	525	435	262	550	8	3,200	.....	2	2	.....	63	76
Edmonton	82,101	33,390	44,077	4,634	39,521	34	139	215	281	195	238	12	1,243	.....	.....	1	.....	9	9
Hobbema	76,420	50,132	20,354	5,934	31,277	3	195	306	445	250	417	3	2,155	.....	.....	.....	.....	.....	.....
Lesser Slave Lake	251,415	150,684	99,984	747	1,330	.....	268	391	105	96	220	.....	1,048	2	.....	.....	.....	.....	.....
Peigan	93,142	700	88,054	4,388	154,550	20	80	91	174	129	219	2	1,040	.....	1	2	.....	13	48
Saddle Lake	88,736	26,894	59,788	2,054	46,985	2	169	206	169	140	270	1	895	.....	.....	.....	.....	.....	2
Sarcee	69,120	40,000	28,015	1,105	69,120	39	3	35	40	45	90	.....	300	2	1	1	.....	2	6
Stony	88,258	40,000	48,088	170	13,000	10	134	92	52	84	258	.....	.....	.....	3	.....	.....	.....	.....
Total	1,278,858	349,048	860,295	69,515	503,979	356	1,400	2,484	2,261	1,522	2,602	34	10,521	6	8	8	.....	109	336
British Columbia																			
Babine	33,359	21,406	9,264	2,689	2,776	352	318	419	158	64	277	14	5,150	11	10	4	2	1	.....
Bella Coola	19,135	18,963	133	39	1,212	230	185	375	30	13	42	7	1,320	5	6	5	.....	10	2
Cowichan	19,878	10,605	5,567	3,706	5,619	654	32	289	316	82	378	103	5,255	2	.....	7	.....	.....	.....
Kamloops	171,052	90,482	76,497	4,073	106,205	252	322	659	1,127	422	524	17	1,480	17	5	3	.....	.....	6
Kootenay	42,316	16,800	23,937	1,579	2,332	52	146	191	242	60	211	30	330	5	.....	1	.....	.....	3
Kwawkewlth	16,305	15,861	421	23	37	200	98	.....	.....	.....	.....	6	2,160	.....	.....	4	.....	2	6
Lytton	51,382	31,250	16,709	3,423	5,464	443	208	506	476	114	370	37	2,956	34	5	3	.....	.....	4
New Westminster	23,957	17,635	4,903	1,419	4,910	366	.....	208	91	32	105	32	1,129	17	4	3	.....	.....	1
Okanagan	146,530	75,350	66,030	5,150	55,000	229	146	595	595	91	490	83	2,050	10	3	3	.....	14	25
Queen Charlotte	3,484	2,152	1,318	14	17	126	101	104	2	.....	1	4	700	2	2	2	1	1	1
Skeena River	71,642	70,870	523	249	181	504	145	247	3	.....	4	.....	765	10	4	8	3	21	5
Stikine	415	15	399	1	.....	11	88	.....	.....	.....	7	.....	2,094	.....	.....	.....	.....	.....	.....
Stuart Lake	34,594	29,369	4,273	952	4,984	43	267	310	86	61	175	9	2,710	16	1	.....	.....	6	93
Vancouver	17,553	16,231	848	474	420	289	94	147	16	.....	18	22	1,050	7	4	4	.....	3	3
West Coast	12,131	11,665	338	128	128	402	210	4	3	1	5	7	238	3	2	1	2	.....	.....
Williams Lake	77,078	30,391	45,415	1,272	40,581	18	440	283	201	195	250	9	1,555	13	4	.....	1	2	3
Total	740,811	459,045	256,575	25,191	229,866	4,171	2,800	4,337	3,346	1,135	2,857	380	30,942	152	50	48	9	60	152
Manitoba																			
Birtle	52,809	31,135	17,749	3,925	11,600	23	140	286	218	138	374	.....	2,280	4	.....	.....	.....	1	6
Clandeboye	65,597	54,160	10,931	506	914	6	439	183	77	20	49	.....	443	12	.....	15	.....	11	.....
Fisher River	94,492	93,347	806	339	3,365	2	260	352	157	151	251	1	925	5	1	5	1	14	2
Griswold	12,294	900	8,002	3,392	1,672	36	53	141	176	102	267	3	620	1	1	1	.....	5	.....

Manitowapah	94,477	46,194	47,921	362	1,042	7	343	388	82	172	320	.....	2,020	10	.....	9	.....	24	.....
Norway House	66,141	55,460	10,608	73	71	5	462	95	4	.....	12	.....	440	.....	2	5	.....	.....	.....
Pas	55,639	46,120	9,452	67	1,405	49	441	192	31	21	35	.....	400	13	2	11	1	10	.....
Portage la Prairie	22,452	3,800	13,234	5,418	5,985	7	121	170	96	81	162	8	451	2	.....	2	.....	11	6
Total	463,901	331,116	118,703	14,082	26,055	135	2,259	1,807	841	685	1,470	12	7,579	47	6	48	2	76	14
New Brunswick																			
Northern Division	6,506	6,066	247	193	230	59	12	22	7	3	12	2	50	1	1	2	.....	.....	1
Northeastern Division	26,952	26,039	741	172	913	227	37	130	66	22	82	.....	570	5	1	5	.....	9	.....
Southwestern Division	1,049	957	76	10	73	59	.....	20	4	.....	5	.....	350	.....	2	4	.....	.....	.....
Total	34,507	33,062	1,064	381	1,216	345	49	184	77	25	99	2	970	6	4	11	.....	9	1
Northwest Territories																			
Fort Resolution	.....	.....	.....	.....	.....	.....	196	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nova Scotia																			
Annapolis	55	35	12	8	6	15	.....	6	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1
Antigonish and Guysboro	634	304	240	90	200	38	13	11	4	2	8	.....	72	1	.....	1	.....	.....	.....
Cape Breton (Eskasoni)	2,800	2,000	555	245	300	20	2	20	5	2	10	.....	40	1	.....	1	.....	5	.....
Cape Breton (Sydney)	69	24	42	3	69	22	.....	22	.....	.....	1	1	65	1	.....	1	.....	2	.....
Colchester	225	150	60	15	50	36	.....	10	5	2	10	2	100	1	.....	1	.....	1	.....
Cumberland	1,020	992	25	3	20	.....	14	2	2	.....	2	1	.....	1	.....	.....	.....	.....	.....
Digby	1,600	1,200	350	50	100	19	.....	4	.....	.....	.....	.....	50	1	.....	1	.....	.....	.....
Halifax	1,345	1,168	77	100	75	22	7	1	2	1	3	1	27	.....	.....	.....	.....	.....	.....
Hants (Indian Brook)	2,053	1,925	120	8	85	10	.....	13	3	1	14	.....	100	1	.....	1	.....	1	.....
Hants (Windsor)	1,000	994	.....	6	.....	3	3	4	.....	.....	4	.....	200	.....	.....	.....	.....	.....	.....
Inverness	2,755	2,055	624	76	519	43	6	7	20	4	18	1	175	1	1	2	.....	1	.....
Kings	497	438	55	4	12	9	.....	2	1	.....	1	.....	30	.....	.....	.....	.....	.....	.....
Lunenburg	2,953	2,014	914	25	130	23	.....	20	4	1	5	1	130	.....	.....	1	.....	.....	.....
Pictou	210	.....	199	11	30	30	8	5	7	.....	10	2	155	2	.....	1	.....	1	.....
Queens	1,975	1,315	654	6	25	6	.....	9	.....	.....	2	.....	15	.....	.....	.....	.....	.....	.....
Richmond	1,281	850	230	201	225	30	10	18	20	2	30	.....	200	1	1	1	.....	3	2
Shelburne	.....	.....	.....	.....	2	7	.....	3	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Victoria	796	516	220	60	50	22	3	2	8	.....	6	.....	30	.....	.....	1	.....	1	.....
Yarmouth	21	19	2	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	21,289	15,999	4,379	911	1,898	358	66	159	81	15	120	11	1,389	11	2	12	.....	15	3
Ontario																			
Alnwick	3,575	875	150	2,550	2,700	40	.....	25	52	15	47	14	271	1	1	1	.....	2	1
Cape Croker	15,586	10,028	5,200	358	2,883	36	71	132	168	35	127	16	600	2	1	3	2	3	6
Caradoc	14,357	1,875	8,617	3,865	10,300	258	128	403	720	197	545	35	1,625	9	3	6	.....	15	3
Chapleau	45,340	45,040	289	11	12	.....	.....	.....	.....	.....	.....	.....	275	3	.....	.....	.....	.....	.....
Christian Island	13,264	12,314	450	500	590	26	22	35	28	11	30	2	350	2	1	1	1	2	2
Fort Frances	81,707	80,238	658	811	1,409	46	120	43	33	10	33	5	825	.....	1	2	.....	3	7
Fort William	42,297	41,899	305	93	49	93	85	16	9	.....	5	.....	358	7	2	8	.....	2	.....
Georgina Island	3,575	3,200	220	155	400	12	15	33	31	9	24	.....	150	1	1	1	.....	.....	2
Golden Lake	1,500	1,200	260	40	300	5	20	15	12	.....	12	5	175	1	.....	1	.....	.....	1
Gore Bay	14,570	11,894	1,746	930	1,889	15	116	304	108	29	141	6	570	4	1	4	.....	2	3
Kenora	122,753	121,985	642	120	358	.....	225	139	22	.....	104	.....	8,050	.....	5	3	.....	.....	.....
Manitowaning	179,685	146,775	27,430	5,474	11,340	60	517	1,341	505	274	827	14	4,044	11	3	9	.....	6	10
Moravian	3,028	775	1,453	800	2,500	37	36	100	100	35	100	12	115	2	1	1	.....	4	1
New Credit	6,000	65	1,900	4,035	6,000	69	2	100	140	40	130	17	500	2	1	1	.....	2	1
Parry Sound	76,245	74,195	1,210	840	1,300	38	88	49	78	26	58	3	165	8	1	6	3	1	4
Rama	2,300	1,150	950	200	1,250	61	9	41	11	8	19	10	200	1	1	1	.....	9	.....
Rice Lake	3,860	1,900	810	1,150	2,150	65	13	74	81	37	72	12	210	2	2	2	.....	2	.....

TABLE No. 3—LAND: PRIVATE AND PUBLIC BUILDINGS AND PROPERTY—*Concluded*

Agencies	Total Area of Reserve (Acres)	Acres under Wood	Acres Cleared but not Cultivated	Acres under Actual Cultivation	Acres Fenced	Private Property								Public Property					
						Stone, Brick and Frame Dwellings	Other Dwellings	Outbuildings, etc.	Ploughs, Harrows, Drills, etc.	Mowers, Reapers, Binders, Threshers, etc.	Carts, Wagons and Vehicles	Automobiles	Tools and small Implements	Churches	Council Houses	School Houses	Saw Mills	Other Buildings	Engines and Machinery
ONTARIO—*Concluded*																			
Sarnia	50,211	41,525	7,013	1,673	14,230	212	118	495	455	195	500	25	1,040	7	4	5	2	10	8
Saugeen	9,020	3,970	4,640	410	1,800	60	28	131	175	35	145	15	300	5	1	3	.....	5	.....
Sault Ste. Marie	39,600	36,925	2,215	460	1,946	62	91	138	85	18	174	.....	1,375	5	1	4	2	.....	5
Savanne	101,267	100,639	561	67	.....	.....	198	38	6	.....	11	1	6,500	.....	1	1	.....	.....	.....
Scugog	800	50	241	509	800	8	.....	9	5	3	11	2	70	1	.....	.....	.....	.....	.....
Six Nations	43,696	8,620	8,060	27,016	43,696	550	220	1,650	2,349	490	1,640	40	9,890	15	1	11	.....	24	60
Sturgeon Falls	64,800	64,278	20	502	311	61	79	89	40	6	87	.....	500	4	.....	4	.....	.....	.....
Thessalon	60,374	58,822	740	812	809	44	77	132	22	9	40	5	1,010	4	.....	5	.....	.....	.....
Tyendinaga	17,604	7,121	2,643	7,840	13,720	237	1	556	450	230	450	50	825	2	1	4	.....	3	3
Total	1,017,014	877,358	78,429	61,227	122,742	2,095	2,279	6,088	5,685	1,712	5,332	289	39,993	99	34	87	10	95	117
PRINCE EDWARD ISLAND	1,668	726	347	595	595	45	15	25	30	4	10	.....	410	1	1	1	.....	3	2
QUEBEC																			
Bécancour	122	60	.....	62	86	5	.....	4	2	2	4	.....	7	.....	.....	.....	.....	.....	.....
Bersimis	63,197	61,530	1,581	86	70	.....	107	21	7	.....	30	1	365	1	.....	1	.....	1	1
Cacouna	400	400	.....	.....	.....	.....	.....	2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Caughnawaga	12,327	1,000	6,800	4,527	5,100	568	.....	1,300	23	5 150	1,300	40	1,000	1	1	6	.....	6	8
Jeune Lorette	27	.....	27	.....	20	97	.....	22	.....	.....	44	11	240	1	1	1	.....	.....	13
Maniwaki	44,537	42,837	216	1,484	808	6	68	110	71	45	108	3	550	.....	1	2	.....	2	.....
Maria	416	150	223	43	50	25	.....	22	6	3	8	1	80	1	.....	1	.....	.....	1
Mingan	.....	.....	.....	.....	.....	14	.....	10	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Oka	1,500	300	300	900	1,500	100	.....	125	75	25	125	2	1,000	1	.....	2	.....	.....	8
Pierreville	579	.....	354	225	275	74	.....	50	14	7	13	2	225	2	1	2	.....	.....	.....
Point Bleue	3,779	2,040	480	1,259	1,369	77	19	149	60	49	184	9	375	2	.....	1	.....	1	6
Restigouche	8,856	8,426	150	280	430	102	.....	192	32	12	88	2	280	1	1	1	1	5	2
Seven Islands	160	150	10	.....	.....	10	60	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
St. Regis	7,384	190	5,436	1,758	685	241	35	261	505	204	318	3	1,525	2	.....	6	.....	15	29
Timiskaming	34,136	31,540	2,175	421	420	16	30	48	20	5	28	3	300	.....	.....	1	.....	3	.....
Total	177,420	148,623	17,752	11,045	10,813	1,335	319	2,316	1,027	502	2,250	80	5,947	14	5	24	1	33	68
SASKATCHEWAN																			
Assiniboine	40,897	27,264	11,389	2,244	15,300	12	34	75	52	56	128	1	438	.....	2	1	.....	4	5
Battleford	221,347	52,316	163,922	5,109	52,370	1	373	405	384	333	429	2	2,420	1	5	1	1	4	7

Carlton	193,153	81,824	106,230	5,099	17,497	.....	203	198	173	139	204	4	703	6	.....	6	1	14	3
Crooked Lakes	99,978	36,500	58,500	4,978	19,700	7	151	300	259	200	265	3	1,900	1	.....	.....	.....	.....	.....
Duck Lake	119,098	25,991	89,294	3,813	10,393	9	198	447	314	163	332	.....	691	3	1	3	.....	1	7
File Hills Agency	57,868	20,000	37,132	736	11,000	5	31	47	36	30	70	.....	290	1	.....	1	.....	.....	.....
File Hills Colony	26,631	7,000	15,610	4,021	4,500	18	12	112	130	72	90	.....	350	2	.....	.....	.....	2	2
Isle a la Crosse	105,822	104,297	1,525	.....	30	.....	309	126	.....	.....	.....	.....	232	.....	.....	1	.....	.....	.....
Moose Mountain	30,088	25,035	4,070	983	30,088	1	52	76	78	55	115	.....	207	2	1	1	.....	2	1
Moose Woods	4,160	1,368	2,619	173	170	1	30	26	24	36	49	.....	49	.....	.....	1	.....	1	.....
Onion Lake	197,834	53,218	142,320	2,296	11,500	3	190	150	98	112	328	4	2,050	1	.....	1	2	.....	3
Pelly	55,472	19,150	33,127	3,195	7,[illegible]80	9	110	182	100	89	153	1	770	3	.....	4	.....	3	3
Qu'Appelle	63,961	6,910	49,585	7,466	33,500	42	141	220	276	216	502	3	1,100	4	3	.....	.....	.....	8
Touchwood	109,713	60,172	44,877	4,664	50,032	6	222	362	359	255	349	.....	1,340	3	.....	4	.....	25	13
Wood Mountain Reserve	6,720	190	6,270	260	800	.....	13	15	10	14	20	1	140	.....	1	.....	.....	.....	.....
Total	1,332,742	521,235	766,470	45,037	264,360	114	2,069	2,741	2,293	1,770	3,034	19	12,680	27	13	24	4	56	52
YUKON TERRITORY																			
Yukon	2,211	2,207	.....	4	22	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	4	2

RECAPITULATION

PROVINCES																			
Alberta	1,278,858	349,048	860,295	69,515	503,979	356	1,400	2,484	2,261	1,522	2,602	34	10,521	6	8	8	.....	109	336
British Columbia	740,811	459,045	256,575	25,191	229,866	4,171	2,800	4,337	3,346	1,135	2,857	380	30,942	152	50	48	9	60	152
Manitoba	463,901	331,116	118,703	14,082	26,055	135	2,259	1,807	841	685	1,470	12	7,579	47	6	48	2	76	14
New Brunswick	34,507	33,062	1,064	381	1,216	345	49	184	77	25	99	2	970	6	4	11	.....	9	1
Northwest Territories	.....	.....	.....	.....	.....	.....	198	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nova Scotia	21,289	15,999	4,379	911	1,898	358	66	159	81	15	126	11	1,389	11	2	12	.....	15	3
Ontario	1,017,014	877,358	78,429	61,227	122,742	2,095	2,279	6,088	5,685	1,712	5,332	289	39,993	99	34	87	10	95	117
Prince Edward Island	1,668	726	347	595	595	45	15	25	30	4	10	.....	410	1	1	1	.....	3	2
Quebec	177,420	148,623	17,752	11,045	10,813	1,335	319	2,316	1,027	502	2,250	80	5,947	14	5	24	1	33	68
Saskatchewan	1,332,742	521,235	766,470	45,037	264,360	114	2,069	2,741	2,293	1,770	3,034	19	12,680	27	13	24	4	56	52
Yukon Territory	2,211	2,207	.....	4	22	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	4	2
Total	5,070,421	2,738,419	2,104,014	227,988	1,161,546	8,954	11,454	20,229	15,641	7,370	17,780	827	110,431	364	123	264	26	460	747

Table No. 4—LIVE STOCK AND POULTRY: GENERAL EFFECTS

Agencies	Horses			Cattle					Poultry	General Effects					
	Stallions	Geldings and Mares	Foals	Bulls	Steers and Work Oxen	Milch Cows	Young Stock	Other Stock		Motor and Sail Boats	Row Boats and Canoes	Rifles and Shot Guns	Steel Traps	Nets	Tents
Alberta															
Blackfoot	...	3,000	400	28	384	793	619	30	400	...	...	...	30	...	175
Blood	10	5,100	150	23	539	860	460	...	1,350	...	...	50	230	...	460
Edmonton	...	488	...	10	99	199	182	147	1,880	...	16	145	1,080	73	124
Hobbema	...	1,027	134	9	180	238	135	25	655	...	...	220	824	62	127
Lesser Slave Lake	34	1,176	196	7	24	147	154	...	...	...	283	735	7,207	474	515
Peigan	6	2,070	...	16	138	...	929	674	200	...	...	48	...	...	123
Saddle Lake	2	521	...	3	10	273	319	65	610	...	75	179	1,989	181	127
Sarcee	5	700	...	11	46	163	139	...	200	...	...	20	300	...	40
Stony	25	1,100	220	...	...	15	357	352	200	...	...	160	800	...	200
Total	82	15,182	1,100	107	1,420	2,688	3,294	1,293	5,495	...	374	1,557	12,460	790	1,891
British Columbia															
Babine	9	569	78	19	337	282	197	...	460	38	105	1,366	24,600	266	206
Bella Coola	4	170	32	5	25	91	62	100	350	200	190	550	4,700	110	105
Cowichan	...	174	31	2	...	130	31	760	9,800	214	330	536	21	99	192
Kamloops	29	2,220	94	28	160	825	357	440	1,550	...	51	280	105	...	292
Kootenay	14	1,695	260	12	39	815	300	...	725	...	53	178	825	...	142
Kwawkewlth	...	...	...	...	...	1	2	...	258	154	233	280	3,250	209	74
Lytton	24	507	153	29	119	88	321	285	1,815	5	97	313	5,222	64	187
New Westminster	6	329	50	12	91	257	189	634	3,665	47	197	356	1,465	98	72
Okanagan	42	1,300	265	59	1,370	183	1,180	1,550	5,850	2	65	480	1,075	36	290
Queen Charlotte	...	3	...	...	9	43	21	...	280	94	110	180	370	45	35
Skeena River	3	19	7	4	4	23	10	15	1,150	268	313	687	4,400	266	161
Stikine	...	21	...	...	...	...	...	...	...	5	69	397	2,800	136	160
Stuart Lake	8	541	121	11	77	208	138	...	138	23	263	644	5,590	298	194
Vancouver	...	27	3	1	19	15	14	7	2,400	113	184	291	755	113	71
West Coast	...	5	...	15	17	49	44	25	1,540	279	1,248	791	2,696	228	36
Williams Lake	79	2,790	578	42	...	50	...	2,040	2,060	...	49	379	4,710	32	227
Total	218	10,370	1,672	239	2,267	3,060	2,866	5,856	32,041	1,442	3,557	7,708	62,584	2,000	2,444
Manitoba															
Birtle	5	376	17	2	10	37	47	...	1,593	...	...	160	1,135	...	139
Clandeboye	...	123	17	4	73	133	63	...	345	19	596	645	6,400	1,017	499
Fisher River	...	245	39	12	296	458	244	9	978	1	118	205	3,302	775	84
Griswold	1	243	24	1	6	47	46	...	785	...	1	119	1,662	...	86
Manitowapah	2	498	34	14	155	602	695	59	850	26	254	470	4,825	1,750	213
Norway House	...	13	...	1	5	30	18	...	...	9	755	970	8,150	1,950	605
Pas	...	181	11	3	79	199	222	...	...	...	510	635	17,500	1,180	545
Portage la Prairie	1	308	16	2	4	37	47	40	600	...	8	107	1,600	...	65
Total	9	1,987	158	39	628	1,543	1,382	108	5,151	55	2,242	3,311	44,574	6,672	2,236

New Brunswick															
Northern Division	.....	16	1	1	1	10	8	2	175	5	8	14	170	3	12
Northeastern Division	.....	20	.....	.....	2	21	16	3	233	35	119	175	285	182	36
Southeastern Division	.....	2	.....	.....	.....	.....	.....	.....	45	1	25	69	810	2	.....
Total	.....	38	1	1	3	31	24	5	453	41	152	258	1,265	187	48
Northwest Territories															
Fort Resolution	.....	.....	.....	.....	.....	.....	.....	.....	1,850	53	640	735	9,080	870	391
Nova Scotia															
Annapolis	.....	.....	.....	.....	.....	2	.....	.....	25	.....	4	15	45	4	4
Antigonish and Guysboro	.....	3	.....	.....	4	6	8	17	65	1	3	21	45	4	3
Cape Breton (Eskasoni)	.....	10	.....	1	.....	20	10	5	50	2	2	15	40	2	5
Cape Breton (Sydney)	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	3	60	.....	.....
Colchester	.....	4	.....	.....	.....	5	2	9	15	.....	2	20	60	.....	1
Cumberland	.....	1	.....	.....	.....	1	.....	.....	12	.....	1	9	110	.....	1
Digby	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	11	200	.....	6
Halifax	.....	3	.....	.....	.....	9	11	.....	80	4	11	30	.....	.....	.....
Hants (Indian Brook)	.....	2	.....	.....	.....	5	5	1	26	.....	.....	10	85	.....	1
Hants (Windsor)	.....	1	.....	.....	.....	1	2	.....	25	1	2	12	40	2	2
Inverness	.....	13	.....	.....	.....	17	7	.....	13	2	13	35	350	4	2
Kings	.....	1	.....	.....	.....	2	2	2	20	.....	2	10	45	1	3
Lunenburg	.....	2	.....	.....	4	5	8	12	90	.....	8	8	20	4	2
Pictou	.....	2	.....	.....	.....	1	1	.....	33	2	8	41	120	.....	1
Queens	.....	.....	.....	.....	2	.....	1	.....	12	.....	4	11	60	2	2
Richmond	.....	4	.....	.....	4	12	6	4	13	6	8	34	74	12	2
Shelburne	.....	.....	.....	.....	.....	1	2	.....	25	.....	2	10	100	1	2
Victoria	.....	6	.....	1	.....	15	6	.....	35	.....	7	15	95	1	.....
Yarmouth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
Total	.....	53	.....	2	14	102	72	50	539	18	73	312	1,549	37	37
Ontario															
Alnwick	.....	34	.....	.....	.....	31	15	9	400	1	34	40	2,580	.....	13
Cape Croker	2	86	6	3	24	137	228	56	600	8	23	22	84	86	8
Caradoc	1	380	31	7	180	430	240	725	4,800	.....	4	180	650	.....	9
Chapleau	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	275	300	3,500	250	200
Christian Island	.....	58	.....	1	6	35	35	50	300	7	16	40	150	50	15
Fort Frances	4	79	8	1	.....	11	8	2	181	20	150	193	3,593	384	101
Fort William	.....	40	.....	1	.....	20	22	.....	525	21	332	487	3,620	561	260
Georgina Island	.....	29	3	1	.....	22	14	30	260	6	10	11	50	4	2
Golden Lake	.....	10	2	.....	.....	12	.....	.....	200	1	20	40	200	.....	25
Gore Bay	.....	99	9	3	21	64	37	174	423	13	11	55	233	40	.....
Kenora	13	104	3	.....	6	7	2	.....	23	27	305	336	11,500	505	267
Manitowaning	3	429	49	7	.....	179	126	287	1,480	96	125	323	2,710	203	91
Moravian	.....	80	3	.....	.....	40	24	50	1,100	.....	5	25	60	.....	6
New Credit	.....	103	.....	2	9	103	21	83	537	.....	1	17	127	.....	.....
Parry Sound	2	66	3	6	6	52	64	33	500	12	64	240	730	24	50
Rama	.....	11	1	.....	.....	12	4	2	200	.....	30	70	1,500	.....	25
Rice Lake	.....	38	3	3	.....	73	90	80	700	5	111	165	8,300	.....	29

TABLE No. 4.—LIVE STOCK AND POULTRY: GENERAL EFFECTS—*Concluded*

Agencies	Horses			Cattle					Poultry	General Effects					
	Stallions	Geldings and Mares	Foals	Bulls	Steers and Work Oxen	Milch Cows	Young Stock	Other Stock		Motor and Sail Boats	Row Boats and Canoes	Rifles and Shot Guns	Steel Traps	Nets	Tents
ONTARIO—*Concluded*															
Sarnia	5	430	45	5	75	240	225	190	3,210	11	100	230	6,500	10	4
Saugeen	.....	62	3	.....	.....	50	38	8	600	.....	5	78	270	10	5
Sault Ste. Marie	.....	142	11	7	16	101	39	.....	1,350	31	90	148	2,800	160	40
Savanne	.....	11	.....	.....	.....	.....	.....	.....	35	30	344	460	23,500	526	286
Scugog	.....	3	.....	.....	.....	.....	.....	.....	50	.....	15	10	800	.....	5
Six Nations	6	850	210	31	670	1,370	1,960	2,900	45,000	.....	28	216	400	.....	5
Sturgeon Falls	7	65	8	13	12	65	58	20	840	66	185	335	2,050	120	165
Thessalon	3	50	7	3	3	40	27	57	895	30	86	183	1,106	71	104
Tyendinaga	.....	300	15	35	20	650	200	500	8,000	7	30	50	1,500	20	3
Total	46	3,559	420	129	1,048	3,744	3,477	5,256	72,209	422	2,399	4,254	78,513	3,024	1,718
PRINCE EDWARD ISLAND	.....	16	1	.....	.....	16	12	.....	130	4	9	27	60	32	.....
QUEBEC															
Becancour	.....	2	1	1	.....	9	4	3	70	.....	1	3	38	.....	.....
Bersimis	.....	15	.....	2	.....	18	5	.....	155	11	165	130	2,850	22	195
Cacouna	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	15	61	.....	.....
Caughnawaga	2	250	50	170	.....	1,500	200	700	7,000	15	40	200	75	3	2
Jeune Lorette	.....	2	1	.....	.....	3	.....	.....	400	.....	30	62	825	.....	10
Maniwaki	1	57	1	4	1	91	44	31	385	.....	74	125	1,987	31	71
Maria	.....	3	.....	2	.....	14	3	2	40	.....	10	18	14	.....	2
Mingan	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	30	60	1,800	6	25
Oka	.....	80	25	10	.....	75	40	40	600	.....	40	40	30	.....	5
Pierreville	.....	5	.....	1	.....	23	12	5	50	.....	20	20	60	2	3
Pointe Bleue	3	66	22	15	10	138	40	125	1,300	1	200	500	9,000	200	250
Restigouche	.....	33	.....	5	8	25	40	.....	250	.....	4	150	300	.....	.....
Seven Islands	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	330	525	11,000	200	250
St. Regis	5	211	22	30	24	380	290	220	3,800	55	195	100	1,400	50	9
Timiskaming	.....	20	.....	1	.....	18	20	15	250	3	150	300	3,000	150	150
Total	11	744	122	241	43	2,294	698	1,141	14,300	93	1,293	2,248	32,440	664	972
SASKATCHEWAN															
Assiniboine	.....	372	20	.....	10	57	90	.....	233	.....	.....	38	585	.....	33
Battleford	4	1,296	30	15	191	352	219	19	2,110	.....	58	428	4,170	242	357
Carlton	.....	590	.....	30	152	734	732	.....	971	.....	33	136	1,869	57	138
Crooked Lakes	.....	574	.....	7	107	251	215	79	1,550	.....	.....	195	950	19	145
Duck Lake	2	498	.....	.....	111	344	406	21	585	.....	8	211	2,440	25	97
File Hills Agency	.....	148	14	3	26	10	22	61	240	.....	.....	20	90	.....	30
File Hills Colony	1	395	22	2	50	36	54	115	700	.....	.....	20	50	.....	10
Isle a la Crosse	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	378	480	8,300	640	335
Moose Mountain	1	111	.....	2	32	43	46	.....	100	.....	.....	60	750	2	60
Moose Woods	1	86	.....	.....	16	78	109	.....	30	.....	2	18	101	1	17
Onion Lake	.....	705	.....	10	161	430	254	99	1,600	.....	81	334	10,400	160	139
Pelly	.....	217	.....	7	77	183	154	.....	650	.....	.....	140	1,000	.....	79

Qu'Appelle	.....	565	45	10	.....	265	273	25	1,200	.....	4	122	625	17	155
Touchwood	.....	427	.....	7	58	245	286	94	705	.....	.....	231	3,200	.....	163
Wood Mountain Reserve	.....	107	1	1	2	4	.....	.....	25	.....	.....	13	.....	.....	13
Total	9	6,091	132	94	993	3,032	2,860	513	10,699	.....	564	2,446	35,530	1,163	1,771
YUKON TERRITORY															
Yukon	.....	1	.....	.....	.....	2	1	.....	35	2	.....	4	.....	.....	2

RECAPITULATION

PROVINCES															
Alberta	82	15,182	1,100	107	1,420	2,688	3,294	1,293	5,495	.....	374	1,557	12,460	790	1,891
British Columbia	218	10,370	1,672	239	2,267	3,060	2,866	5,856	32,041	1,442	3,557	7,708	62,584	2,000	2,444
Manitoba	9	1,987	158	39	628	1,543	1,382	108	5,151	55	2,242	3,311	44,574	6,672	2,236
New Brunswick	.....	38	1	1	3	31	24	5	453	41	152	258	1,265	187	48
Northwest Territories	.....	.....	.....	.....	.....	.....	.....	.....	1,850	53	640	735	9,080	870	391
Nova Scotia	.....	53	.....	2	14	102	72	50	539	18	73	312	1,549	37	37
Ontario	46	3,559	420	129	1,048	3,744	3,477	5,256	72,209	422	2,399	4,254	78,513	3,024	1,718
Prince Edward Island	.....	16	1	.....	.....	16	12	.....	130	4	9	27	60	32	.....
Quebec	11	744	122	241	43	2,294	698	1,141	14,300	93	1,293	2,248	32,440	664	972
Saskatchewan	9	6,091	132	94	993	3,032	2,860	513	10,699	.....	564	2,446	35,530	1,163	1,771
Yukon Territory	.....	1	.....	.....	.....	2	1	.....	35	2	.....	4	.....	.....	2
Total	375	38,041	3,606	852	6,416	16,512	14,686	14,222	142,902	2,130	11,303	22,860	278,055	15,439	11,510

TABLE No. 5.—VALUE OF REAL AND PERSONAL PROPERTY AND PROGRESS DURING THE YEAR

Agencies	Total Value of Lands in Reserves	Value of Private Fencing	Value of Private Buildings	Value of Public Buildings Property of the Band	Value of Implements and Vehicles	Value of Live Stock and Poultry	Value of General Effects	Value of Household Effects	Total Value of Real and Personal Property	Progress During the Year 1926		
										Value of New Land Improvements	Value of Buildings Erected	Total Increase in Value
	$	$	$	$	$	$	$	$	$	$	$	$
ALBERTA												
Blackfoot	3,000,000	24,000	302,000	58,500	110,000	130,000	8,500	25,500	3,658,500	500	4,500	5,000
Blood	7,081,720	31,000	82,400	23,500	167,000	254,760	38,500	28,500	7,707,380	5,000	2,400	7,400
Edmonton	1,185,915	16,850	90,800	9,425	34,700	30,885	5,810	13,850	1,388,235	2,440	4,100	6,540
Hobbema	1,528,480	31,277	39,810	.....	83,692	75,113	11,284	6,525	1,776,181	7,264	1,510	8,774
Lesser Slave Lake	2,393,302	14,200	53,650	.....	20,230	66,755	47,259	28,245	2,623,641	1,275	.....	1,275
Peigan	985,090	4,687	37,984	10,230	51,878	110,170	16,117	10,739	1,226,895	4,045	900	4,945
Saddle Lake	718,208	2,922	23,595	.....	20,456	31,781	5,335	7,100	809,397	907	350	1,257
Sarcee	1,180,420	10,500	20,500	35,000	10,000	29,610	2,000	2,000	1,290,030	325	.....	325
Stony	441,290	9,000	16,000	900	13,210	37,300	8,142	10,000	535,842	.....	.....	.....
Total	18,514,425	144,436	666,739	137,555	511,166	766,374	142,947	132,459	21,016,101	21,756	13,760	35,516
BRITISH COLUMBIA												
Babine	118,890	12,520	150,700	12,750	25,150	74,800	64,300	33,900	493,010	6,250	5,800	12,050
Bella Coola	352,600	2,500	125,000	14,100	22,500	17,825	134,000	62,000	730,525	1,000	8,500	9,500
Cowichan	1,757,300	118,900	185,950	12,300	109,750	48,850	73,700	79,550	2,386,300	2,675	2,800	5,475
Kamloops	3,475,293	53,641	116,130	44,238	105,575	187,450	143,325	17,645	4,143,297	.....	.....	.....
Kootenay	471,980	11,860	20,335	117,700	27,775	87,465	8,190	7,150	752,455	.....	.....	.....
Kwawkewlth	246,159	2,280	176,100	4,400	85,500	258	75,800	76,000	666,497	1,500	5,300	6,800
Lytton	940,666	20,015	76,415	23,580	41,019	74,085	10,385	19,735	1,205,900	4,950	3,400	8,350
New Westminster	771,583	17,645	68,800	20,100	18,925	35,085	27,530	27,975	987,643	.....	.....	.....
Okanagan	1,919,260	23,450	125,650	33,900	51,000	184,000	12,500	20,250	2,370,010	6,500	3,650	10,150
Queen Charlotte	70,000	1,000	72,000	1,600	5,100	3,600	39,000	28,000	220,300	.....	4,000	4,000
Skeena River	1,066,821	10,450	302,000	115,600	5,800	6,825	247,500	61,350	1,816,346	.....	2,000	2,000
Stikine	2,075	40	20,613	.....	4,340	3,500	14,755	27,590	72,913	.....	.....	.....
Stuart Lake	258,846	15,415	92,300	25,200	14,245	34,270	22,450	26,615	489,341	950	300	1,250
Vancouver	1,945,495	5,900	107,000	54,200	11,200	5,800	23,435	26,300	2,179,330	.....	.....	.....
West Coast	112,500	3,815	143,100	3,675	3,144	3,265	60,150	30,840	360,489	.....	3,700	3,700
Williams Lake	472,360	73,000	46,470	12,650	19,110	84,220	14,150	15,400	736,760	.....	750	750
Total	13,981,828	372,431	1,828,563	495,393	550,133	851,298	971,170	560,300	19,611,116	23,825	40,200	64,025
MANITOBA												
Birtle	499,587	2,305	26,775	2,750	20,360	30,850	4,540	4,075	591,242	576	950	1,526
Clandeboye	294,089	5,440	165,000	12,500	8,650	25,195	13,600	23,150	547,624	2,150	3,700	5,850
Fisher River	847,545	9,685	44,005	11,800	15,900	54,830	11,500	12,850	1,008,115	96	860	956
Griswold	217,040	1,135	16,955	8,710	29,600	24,150	2,660	5,645	305,895	100	6,550	6,650
Manitowapah	366,101	2,070	50,000	33,750	16,425	70,350	14,500	12,550	565,746	200	12,850	13,050
Norway House	132,262	710	46,500	7,700	1,570	14,900	51,500	14,600	269,742	.....	1,300	1,300
Pas	270,450	5,180	43,600	13,600	5,200	22,125	68,300	20,500	448,955	.....	.....	.....
Portage la Prairie	354,040	4,400	19,200	14,500	19,080	18,100	1,775	4,300	435,395	360	1,500	1,860
Total	2,981,114	30,925	412,035	105,310	116,785	260,500	168,375	97,670	4,172,714	3,482	27,710	31,192

New Brunswick												
Northern Division	19,060	130	11,500	31,200	1,500	1,830	525	4,750	70,495	150	6,000	6,150
Northeastern Division	45,048	2,328	28,921	35,682	5,244	4,310	6,000	16,490	144,023	250	980	1,230
Southwestern Division	6,850	470	15,630	12,000	500	400	1,240	1,675	38,765	.....	1,550	1,550
Total	70,958	2,928	56,051	78,882	7,244	6,540	7,765	22,915	253,283	400	8,530	8,930
Northwest Territories												
Fort Resolution	.....	.....	.....	.....	.....	.....	34,700	24,000	58,700	.....	.....	.....
Nova Scotia												
Annapolis	1,200	12	1,850	.....	300	75	360	400	4,197	.....	25	25
Antigonish and Guysboro	6,000	975	2,950	3,000	475	675	310	460	14,845	.....	275	275
Cape Breton (Eskasoni)	10,000	200	1,000	4,500	700	1,200	800	900	19,300	200	500	700
Cape Breton (Sydney)	20,000	.....	15,000	2,500	25	.....	250	1,800	39,575	.....	.....	.....
Colchester	3,000	200	6,500	1,000	800	500	400	550	12,950	.....	100	100
Cumberland	1,100	20	750	100	300	150	250	50	2,720	.....	50	50
Digby	1,800	60	2,500	2,000	.....	.....	300	3,500	10,160	.....	450	450
Halifax	3,900	1,400	6,350	.....	1,150	2,175	1,080	2,350	18,405	.....	.....	.....
Hants (Indian Brook)	5,550	135	785	2,900	200	595	202	415	10,782	.....	.....	.....
Hants (Windsor)	10,500	.....	1,500	.....	300	300	400	600	13,600	.....	.....	.....
Inverness	9,725	1,100	16,400	5,500	575	2,550	750	860	37,460	.....	1,800	1,800
Kings	4,500	100	1,200	.....	100	250	250	400	6,800	.....	.....	.....
Lunenburg	3,000	320	2,500	300	250	600	500	1,000	8,470	.....	.....	.....
Pictou	1,500	45	9,200	8,450	400	180	816	1,700	22,291	.....	100	100
Queens	2,500	100	2,000	.....	125	260	325	1,000	6,310	.....	.....	.....
Richmond	7,000	250	3,850	12,000	1,000	2,250	1,000	800	28,150	900	600	1,500
Shelburne	.....	.....	1,500	.....	300	60	500	400	2,760	.....	.....	.....
Victoria	6,500	275	2,500	3,250	400	700	500	400	14,525	40	30	70
Yarmouth	500	.....	500	500	.....	.....	100	200	1,800	.....	.....	.....
Total	98,275	5,192	78,835	46,000	7,400	12,520	9,093	17,785	275,100	1,140	3,930	5,070
Ontario												
Alnwick	75,000	5,000	35,000	8,000	4,600	9,830	2,850	15,200	155,480	.....	1,500	1,500
Cape Croker	150,000	8,490	71,750	35,250	15,600	32,000	7,600	7,800	328,490	40	1,850	1,890
Caradoc	150,350	14,050	116,550	35,000	25,000	35,100	2,225	32,700	410,975	350	750	1,100
Chapleau	18,400	350	35,000	1,000	.....	.....	5,000	.....	59,750	.....	.....	.....
Christian Island	35,700	1,890	8,750	7,150	3,250	7,300	2,000	3,275	69,315	200	200	400
Fort Frances	223,347	1,200	33,100	8,300	17,792	8,100	7,730	11,150	310,719	4,000	1,500	5,500
Fort William	182,460	600	31,500	6,300	2,429	7,470	10,061	8,000	248,820	.....	4,500	4,500
Georgina Island	32,150	350	8,500	5,500	1,000	3,500	5,500	1,500	58,000	755	.....	755
Golden Lake	3,000	700	4,000	3,100	800	1,500	3,000	3,000	19,100	.....	.....	.....
Gore Bay	125,000	14,020	30,000	26,550	9,750	17,870	7,200	16,200	246,590	.....	3,850	3,850
Kenora	128,874	1,074	50,560	325	7,855	6,203	35,885	27,185	257,961	.....	.....	.....
Manitawaning	247,000	22,475	70,275	36,850	44,690	39,220	19,630	43,055	523,195	650	1,500	2,150
Moravian	65,000	4,500	25,000	7,500	10,000	10,000	22,000	2,000	146,000	600	500	1,100
New Credit	225,000	11,500	50,900	9,000	11,375	16,900	1,000	14,500	340,175	.....	350	350
Parry Sound	122,000	950	20,900	19,300	12,200	13,500	7,621	16,000	212,471	.....	5,000	5,000
Rama	50,000	4,100	29,950	13,500	4,500	2,200	2,000	7,500	113,750	.....	.....	.....
Rice Lake	119,500	3,500	66,000	13,000	8,500	20,000	7,900	10,200	248,600	4,500	5,500	10,000
Sarnia	630,450	15,700	107,300	43,500	28,000	26,200	6,400	34,500	892,050	120	1,500	1,620
Saugeen	80,000	2,000	20,000	30,000	7,000	11,600	2,000	4,500	157,100	.....	500	500
Sault Ste. Marie	54,900	2,825	27,000	31,000	7,175	16,000	10,500	13,500	162,900	.....	.....	.....
Savanne	101,962	415	15,375	100	4,705	580	43,885	29,725	196,747	.....	.....	.....

TABLE No. 5.—VALUE OF REAL AND PERSONAL PROPERTY AND PROGRESS DURING THE YEAR—*Concluded*

Agencies	Total Value of Lands in Reserves	Value of Private Fencing	Value of Private Buildings	Value of Public Buildings Property of the Band	Value of Implements and Vehicles	Value of Live Stock and Poultry	Value of General Effects	Value of Household Effects	Total Value of Real and Personal Property	Progress During the Year 1926		
										Value of New Land Improvements	Value of Buildings Erected	Total Increase in Value
	$	$	$	$	$	$	$	$	$	$	$	$
ONTARIO—*Concluded*												
Scugog	60,000	2,000	2,000	500	400	500	300	950	66,650			
Six Nations	1,092,400	436,960	670,000	65,000	286,000	260,000	6,500	74,900	2,891,760			
Sturgeon Falls	242,290	2,350	56,200	19,000	5,300	17,600	23,000	44,000	409,740		9,500	9,500
Thessalon	129,064	9,705	14,500	12,800	5,625	12,600	12,633	8,365	205,292		3,000	3,000
Tyendinaga	645,300	134,825	105,000	44,800	42,800	80,000	2,645	55,800	1,111,170		6,000	6,000
Total	4,989,147	701,529	1,705,110	482,325	566,346	655,773	257,065	485,505	9,842,800	11,215	47,500	58,715
PRINCE EDWARD ISLAND	20,000	1,750	10,000	10,000	1,100	2,100	3,100	3,000	51,050		350	350
QUEBEC												
Bécancour	4,000	500	1,500		350	800	200	750	8,100			
Bersimis	51,000	675	54,300	33,000	900	3,250	8,700	14,000	165,825			
Cacouna	6,000		2,350		250		1,030	4,285	13,915			
Caughnawaga	750,000	8,300	500,000	75,000	60,000	60,000	30,000	120,000	1,603,300	100	8,000	8,100
Jeune Lorette	32,000	600	55,000	31,000	14,000	1,400	2,000	22,000	158,000		1,000	1,000
Maniwaki	35,945	4,640	24,285	2,095	11,775	12,310	6,710	13,090	110,850	350	350	700
Maria	20,000	560	6,000	5,000	400	750	750	3,150	36,610			
Mingan			2,200	4,000			4,000	900	11,100			
Oka	30,000	3,000	20,000	3,000	4,000	9,000		5,000	74,000			
Pierreville	35,000	1,000	63,000	2,500	1,000	2,200	1,700	16,200	122,600	250	1,000	1,250
Pointe Bleue	46,000	6,000	42,500	6,000	17,500	13,500	15,000	15,000	161,500		2,500	2,500
Restigouche	173,000	12,100	56,000		15,000	10,000	18,000	15,000	299,100			
Seven Islands	1,500	25	8,800	4,000			6,000	12,000	32,325			
St. Regis	184,600	2,100	111,000	15,000	13,000	38,000	11,000	38,100	412,800	300	5,000	5,300
Timiskaming	35,000	1,700	9,000	1,700	2,400	4,000	8,000	3,500	65,300			
Total	1,404,045	41,200	955,935	182,295	140,575	155,210	113,090	282,975	3,275,325	1,000	17,850	18,850
SASKATCHEWAN												
Assiniboine	431,420	4,293	18,212	3,477	20,210	30,448	722	10,915	519,697	1,400	600	2,000
Battleford	3,234,773	35,300	75,500	4,700	77,800	76,500	20,050	23,000	3,547,623	3,180	2,100	5,280
Carlton	1,545,224	10,191	50,400	23,459	21,633	73,500	5,117	6,060	1,735,584	3,086	1,178	4,264
Crooked Lakes	924,183	10,000	56,500	200	48,900	51,720	13,050	9,300	1,113,853	900	11,700	12,600
Duck Lake	1,769,725	21,000	40,570	18,000	34,400	94,440	7,740	27,365	2,013,240	2,664	1,050	3,714
File Hills Agency	525,000	1,500	9,000	2,000	6,700	15,500	1,100	3,200	564,000	450	200	650
File Hills Colony	400,000	600	50,000	12,000	21,000	29,000	700	9,000	522,300	250	100	350
Isle a la Crosse	105,822	450	14,681	300	290		29,257	4,605	155,405			
Moose Mountain	250,800	2,000	10,380	3,000	8,000	9,955	1,500	1,700	287,335			
Moose Woods	62,495	6,990	4,050	2,500	6,000	19,290	2,600	10,250	114,175	168		168
Onion Lake	2,191,740	15,700	49,900	5,900	33,800	84,400	12,650	16,400	2,410,490	1,480	2,100	3,580

Pelly	669,824	4,200	28,700	4,400	15,700	31,500	6,150	14,500	774,974	500	700	1,200
Qu'Appelle	960,085	14,025	44,525	31,000	48,850	62,735	5,845	16,000	1,183,065	5,515	2,630	8,145
Touchwood	1,179,468	18,400	36,400	.....	20,350	56,300	19,000	19,200	1,349,118	2,210	4,700	6,910
Wood Mountain Reserve	15,840	20	1,000	100	1,500	4,000	300	800	23,560	.....	.....	.....
Total	14,266,399	144,669	489,818	111,036	365,133	639,288	125,781	172,295	16,314,419	21,803	27,058	48,861
YUKON TERRITORY												
Yukon	2,200	.....	.....	.....	.....	.....	.....	.....	2,200	.....	.....	.....

RECAPITULATION

PROVINCES												
Alberta	18,514,425	144,436	666,739	137,555	511,166	766,374	142,947	132,459	21,016,101	21,756	13,760	35,516
British Columbia	13,981,828	372,431	1,828,563	495,393	550,133	851,298	971,170	560,300	19,611,116	23,825	40,200	64,025
Manitoba	2,981,114	30,925	412,035	105,310	116,785	260,500	168,375	97,670	4,172,714	3,482	27,710	31,192
New Brunswick	70,958	2,928	56,051	78,882	7,244	6,540	7,765	22,915	253,283	400	8,530	8,930
Northwest Territories	.....	.....	.....	.....	.....	.....	34,700	24,000	58,700	.....	.....	.....
Nova Scotia	98,275	5,192	78,835	46,000	7,400	12,520	9,093	17,785	275,100	1,140	3,930	5,070
Ontario	4,989,147	701,529	1,705,110	482,325	566,346	655,773	257,065	485,505	9,842,800	11,215	47,500	58,715
Prince Edward Island	20,000	1,750	10,000	10,000	1,100	2,100	3,100	3,000	51,050	.....	350	350
Quebec	1,404,045	41,200	955,935	182,295	140,575	155,210	113,090	282,975	3,275,325	1,000	17,850	18,850
Saskatchewan	14,266,399	144,669	489,818	111,036	365,133	639,288	125,781	172,295	16,314,419	21,803	27,058	48,861
Yukon Territory	2,200	.....	.....	.....	.....	.....	.....	.....	2,200	.....	.....	.....
Total	56,328,391	1,445,060	6,203,086	1,648,796	2,265,882	3,349,603	1,833,086	1,798,904	74,872,808	84,621	186,888	271,509

TABLE No. 6.—SOURCES AND VALUE OF INCOME

Agencies	Value of Farm Products, including Hay	Value of Beef sold also of that used for Food	Wages Earned	Received from Land Rentals	Received from Timber	Earned by Fishing	Earned by Hunting and Trapping	Earned by other Industries and Occupations	Annuities paid and Interest on Indian Trust Funds	Total Income of Indians
ALBERTA	$	$	$	$ cts.	$ cts.	$	$	$	$ cts.	$ cts.
Blackfoot	155,000	18,450	4,000	41,954 77	.....	.....	200	6,000	87,109 87	312,714 64
Blood	89,215	27,225	15,000	18,352 15	.....	.....	1,500	6,000	7,332 34	164,624 49
Edmonton	66,886	3,906	20,630	.....	334 08	2,110	12,947	5,630	25,164 39	137,607 47
Hobbema	71,440	5,480	8,952	757 50	.....	1,530	3,166	20,670	14,541 83	126,537 33
Lesser Slave Lake	33,906	1,500	22,270	.....	.....	11,865	70,685	1,930	17,318 67	159,474 67
Peigan	23,101	31,235	6,000	1,390 60	.....	.....	.....	.....	7,256 86	68,983 46
Saddle Lake	44,774	4,870	11,370	.....	.....	1,790	7,050	5,275	5,796 95	80,925 95
Sarcee	10,867	3,272	4,286	2,832 50	.....	.....	500	1,000	835 37	23,592 87
Stony	14,200	5,986	24,548	3,153 00	.....	.....	8,790	10,020	4,580 05	71,277 05
Total	509,389	101,924	117,056	68,440 52	334 08	17,295	104,838	56,525	169,936 33	1,145,737 93
BRITISH COLUMBIA										
Babine	31,200	7,550	54,680	120 00	.....	16,450	69,900	31,950	425 02	212,275 02
Bella Coola	8,050	3,700	25,000	100 00	.....	102,000	26,000	10,000	180 85	175,030 85
Cowichan	48,425	2,800	137,400	2,505 10	6,823 19	27,150	1,750	3,100	3,887 53	233,840 82
Kamloops	73,500	.....	.....	3,192 00	517 02	.....	.....	.....	3,914 26	81,123 28
Kootenay	30,547	12,500	24,900	200 00	7,979 57	1,250	4,050	3,850	304 33	85,580 90
Kwawkewlth	.....	.....	16,650	900 00	513 53	50,100	5,050	7,300	1,361 82	81,875 35
Lytton	42,260	12,385	92,700	892 00	367 36	950	4,600	10,100	1,377 32	165,631 68
New Westminster	28,735	6,965	52,600	2,353 30	25,728 56	16,350	8,650	34,200	2,861 65	178,443 51
Okanagan	77,000	20,550	40,000	450 00	1,837 47	550	7,500	5,250	952 03	154,089 50
Queen Charlotte	575	500	14,000	.....	.....	13,000	2,200	6,000	109 65	36,384 65
Skeena River	27,250	500	42,700	150 00	411 97	116,500	50,700	43,250	3,267 99	284,729 96
Stikine	3,365	.....	35,957	.....	.....	11,525	81,924	10,586	.....	143,357 00
Stuart Lake	26,165	6,950	25,610	.....	79 76	14,330	13,050	5,010	2,178 14	93,372 90
Vancouver	4,600	330	31,000	9,503 35	2,365 98	35,500	10,650	24,200	12,836 95	130,986 28
West Coast	769	690	5,525	170 00	.....	46,720	19,985	32,590	95 47	106,544 47
Williams Lake	60,300	6,700	55,000	.....	68 95	.....	24,400	2,250	70 00	148,788 95
Total	462,741	82,120	653,722	20,535 75	46,693 36	452,375	330,409	229,636	33,823 01	2,312,055 12
MANITOBA										
Birtle	32,314	623	9,350	237 20	28 05	1,720	4,160	3,900	3,856 40	56,188 65
Clandeboye	25,530	2,890	22,700	532 00	1,445 30	15,900	27,450	6,500	14,216 59	117,163 89
Fisher River	28,162	4,049	19,600	100 00	.....	21,000	7,500	13,200	9,216 56	102,827 56
Griswold	33,224	760	4,400	.....	.....	.....	1,300	1,350	3 45	41,037 45
Manitowapah	22,650	4,280	9,750	157 00	.....	11,450	7,075	7,350	10,712 07	73,424 07
Norway House	5,100	550	21,000	.....	.....	17,000	106,000	14,200	13,890 00	177,740 00
Pas	12,305	2,370	66,000	201 67	2 00	16,000	143,000	.....	14,193 40	254,072 07
Portage la Prairie	25,850	1,835	1,100	157 09	.....	.....	1,350	1,450	9,012 17	40,754 26
Total	185,135	17,357	153,900	1,384 96	1,475 35	83,070	297,835	47,950	75,100 64	863,207 95

New Brunswick										
Northern Division	2,000	250	13,500		12 00	600	1,700	600	971 63	19,633 63
Northeastern Division	7,210	135	9,200	75 00	641 30	5,100	565	2,800	814 21	26,540 51
Southwestern Division	980		13,000			150	1,200	2,575	51 12	17,956 12
Total	10,190	385	35,700	75 00	653 30	5,850	3,465	5,975	1,836 96	64,130 26
Northwest Territories										
Fort Resolution						25,350	159,600			
Nova Scotia										
Annapolis	300		800			70	160	760		2,090 00
Antigonish and Guysboro	810	100	1,675			425	410	2,350		5,770 00
Cape Breton (Eskasoni)	700	300	2,500			425	500	775		5,200 00
Cape Breton (Sydney)	50		2,000				110	350		2,510 00
Colchester	400	30	1,800				250	2,500		4,980 00
Cumberland	225		1,800				130	200		2,355 00
Digby	300		2,000		11 00	300	500	1,200		4,311 00
Halifax	3,020	1,650	7,820			200		7,150		19,840 00
Hants (Indian Brook)	284		200				80	370		934 00
Hants (Windsor)	300	50	3,500			200	2,000	350		6,400 00
Inverness	1,400	95	3,500			1,400	450	2,200		9,045 00
Kings	300		2,500		100 40	80	350	350		3,680 40
Lunenburg	1,000	150	1,200	20 00		250	1,100			3,720 00
Pictou	300		5,000			50	900	5,000		11,250 00
Queens	150		2,500	100 00		185	500			3,435 00
Richmond	1,500	50	575			250	75	90		2,540 00
Shelburne	150		2,000				350	400		2,900 00
Victoria	2,150	100	7,020			720	375	5,300		15,845 00
Yarmouth			2,000					2,000		4,000 00
									†1,442 08	1,442 08
Total	13,339	2,525	50,570	120 00	111 40	4,555	8,240	31,345	1,442 08	112,247 48
Ontario										
Alnwick	5,500	500	11,775	2,006 75	2 40	950	4,550	900	11,298 69	37,482 84
Cape Croker	9,418	2,410	12,000	555 00	303 22	5,600	200	2,500	21,649 48	54,635 70
Caradoc	76,075	6,275	67,000	2,033 75	4 50		2,125	650	3,527 93	157,691 18
Chapleau	1,540		10,000					35,000	13,780 00	60,320 00
Christian Island	4,500	400	3,800		873 34	400	300	600	13,952 60	24,825 94
Fort Frances	7,950	250	35,000	1,570 60	1,497 49	33,300	46,300	6,700	8,118 42	140,686 51
Fort William	1,650	1,500	39,600	100 00	2,538 80	14,750	27,225		11,037 97	98,401 77
Georgina Island	1,915	620	7,000	195 00	30 00	150	100	500	3,850 89	14,360 89
Golden Lake	600		2,000	164 00			1,000		10 21	3,774 21
Gore Bay	12,522	545	25,000		330 50	300	300		10,430 64	49,428 14
Kenora	7,305		60,095	260 00	9,027 76	60,385	58,910	62,420	17,942 15	276,344 91
Manitowaning	30,390	10,100	83,300	162 50	4,339 93	7,675	4,525	17,200	23,180 17	180,872 60
Moravian	8,500	1,500	7,000	375 00		100	500	6,500	5,435 63	29,910 63
New Credit	10,750	2,950	22,000	4,596 50			550	2,700	4,850 89	48,397 39
Parry Sound	7,450	1,375	36,000	355 00	3,441 54		1,125		16,840 97	66,587 51
Rama	3,250	485	18,000	85 50	26 40	500	3,500	5,000	8,271 82	39,118 72
Rice Lake	16,500	4,000	21,000	290 00		1,800	11,000	7,300	8,882 98	70,772 98
Sarnia	33,000	3,200	43,250	3,325 00	190 53	750	540	9,300	18,573 62	112,129 15
Saugeen	10,500	150	12,000	85 00	459 78	500	900	3,000	16,384 52	43,979 30
Sault Ste. Marie	18,500	3,200	20,500	400 00	3,919 05	16,000	15,500	12,000	12,458 06	102,477 11
Savanne	2,920		61,950			67,820	105,930	57,520	6,165 00	302,305 00
Scugog	200	100	100	313 00		60	800	1,000	1,078 03	3,651 03
Six Nations	298,000		145,000	3,034 00	127 82		1,250	41,980	39,475 06	528,866 88

†Micmacs of Nova Scotia.

TABLE No. 6.—SOURCES AND VALUE OF INCOME—*Concluded*

Agencies	Value of Farm Products, including Hay	Value of Beef sold also of that used for Food	Wages Earned	Received from Land Rentals	Received from Timber	Earned by Fishing	Earned by Hunting and Trapping	Earned by other Industries and Occupations	Annuities paid and Interest on Indian Trust Funds	Total Income of Indians
	$	$	$	$ cts.	$ cts.	$	$	$	$ cts.	$ cts.
ONTARIO—*Concluded*										
Sturgeon Falls	11,000	200	40,000	.....	586 02	2,300	20,000	16,000	61,041 40	151,127 42
Thessalon	9,550	.....	38,000	55 00	1,354 36	1,000	6,100	7,150	6,711 22	69,920 58
Tyendinaga	90,000	3,000	45,000	8,839 81	.....	4,000	350	1,000	5,538 26	157,728 07
†Georgian Bay Islands	.....	.....	.....	†84 32	.....	.....	.....	.....	.....	84 32
Total	679,485	42,760	866,370	28,885 73	29,053,44	218,340	313,580	296,920	350,486 61	2,825,880 78
PRINCE EDWARD ISLAND	2,050	320	875	.....	.....	1,120	250	4,800	.....	9,415 00
QUEBEC										
Bécancour	125	450	350	.....	.....	15	30	982	345 07	2,297 07
Bersimis	1,100	400	5,000	400 00	1,832 68	451	86,000	34,000	6,180 98	135,364 66
Cacouna	.....	.....	2,500	.....	.....	50	200	.....	517 24	3,267 24
Caughnawaga	33,000	2,000	150,000	8,364 24	.....	.....	.....	25,000	232 70	218,596 94
Jeune Lorette	.....	.....	36,500	.....	.....	.....	3,000	33,500	846 49	73,846 49
Maniwaki	7,881	267	31,860	330 00	2,164 54	231	29,565	1,893	3,597 11	77,788 65
Maria	450	40	4,500	.....	.....	50	100	100	.....	5,240 00
Mingan	.....	.....	.....	.....	.....	.....	6,600	200	.....	6,800 00
Oka	7,500	2,000	.....	.....	687 71	100	200	1,000	356 59	11,844 30
Pierreville	2,000	1,500	4,000	256 90	.....	.....	1,000	6,000	203 81	14,960 71
Pointe Bleue	18,500	3,000	22,000	200 00	1,444 76	1,000	75,000	3,000	684 65	124,829 41
Restigouche	3,985	200	8,000	245 00	1,042 05	50	600	600	352 43	15,074 48
Seven Islands	.....	.....	1,500	.....	.....	.....	32,000	1,500	.....	35,000 00
St. Regis	7,000	1,400	135,000	367 56	.....	4,300	4,000	23,500	3,567 39	179,134 95
Temiskaming	5,500	100	7,000	37 00	.....	50	28,000	1,200	2,021 31	43,908 31
Total	87,041	11,357	408,210	10,200 70	7,171 74	6,297	266,295	132,475	18,905 77	947,953 21
SASKATCHEWAN										
Assiniboine	14,855	1,749	1,912	.....	.....	.....	3,010	9,217	1,513 31	32,256 31
Battleford	50,375	6,750	52,400	2,818 00	.....	5,400	21,100	7,150	14,946 80	160,939 80
Carlton	82,218	13,130	9,690	21 00	.....	944	14,850	6,845	21,587 57	149,285 57
Crooked Lakes	40,050	3,630	5,100	.....	.....	.....	3,500	800	19,368 83	72,448 83
Duck Lake	75,350	10,923	11,200	.....	.....	800	10,200	13,500	8,428 38	130,401 38
File Hills Agency	9,000	900	1,500	.....	.....	.....	2,200	6,500	.....	20,100 00
File Hills Colony	40,000	2,000	5,000	.....	.....	.....	1,000	3,000	1,978 33	52,978 33
Isle a la Crosse	.....	.....	.....	.....	.....	.....	47,000	.....	12,487 84	59,487 84
Moose Mountain	6,739	800	1,500	.....	.....	50	3,150	800	2,840 87	15,879 87
Moose Woods	8,740	3,516	2,500	.....	.....	1,000	250	2,000	.....	18,006 00
Onion Lake	53,303	12,100	18,400	.....	.....	13,500	16,000	8,000	5,286 29	126,589 29
Pelly	28,300	3,950	11,100	2,657 00	.....	.....	7,000	.....	16,765 31	69,772 31

Qu'Appelle	200,640	4,940	9,900	1,347 00	.....	230	1,960	4,905	25,415 23	249,337 23
Touchwood	50,490	4,850	10,700	55 00	28 35	.....	12,800	4,500	12,910 70	96,334 05
Wood Mountain Reserve	1,239	125	875	.....	.....	.....	80	.....	2 07	2,321 07
Total	661,299	69,363	141,777	6,898	28 35	21,924	144,100	67,217	143,531 53	1,256,137 88
YUKON TERRITORY										
Yukon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

RECAPITULATION

PROVINCES										
Alberta	509,389	101,924	117,056	68,440 52	334 08	17,295	104,838	56,525	169,936 33	1,145,737 93
British Columbia	462,741	82,120	653,722	20,535 75	46,693 36	452,375	330,409	229,636	33,823 01	2,312,055 12
Manitoba	185,135	17,357	153,900	1,384 96	1,475 35	83,070	297,835	47,950	75,100 64	863,207 95
New Brunswick	10,190	385	35,700	75 00	653 30	5,850	3,465	5,975	1,836 96	64,130 26
Northwest Territories	.....	.....	.....	.....	.....	25,350	159,600	.....	.....	184,950 00
Nova Scotia	13,339	2,525	50,570	120 00	111 40	4,555	8,240	31,345	1,442 08	112,247 48
Ontario	679,485	42,760	866,370	28,885 73	29,053 44	218,340	313,580	296,920	350,486 61	2,825,880 78
Prince Edward Island	2,050	320	875	.....	.....	1,120	250	4,800	.....	9,415 00
Quebec	87,041	11,357	408,210	10,200 70	7,171 74	6,297	266,295	132,475	18,905 77	947,953 21
Saskatchewan	661,299	69,363	141,777	6,898 00	28 35	21,924	144,100	67,217	143,531 53	1,256,137 88
Total	2,610,669	328,111	2,428,180	136,540 66	85,521 02	836,176	1,628,612	872,843	795,062 93	9,721,715 61

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year Ended March 31, 1928

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Standard					
				Boys	Girls	Total		I	II	III	IV	V	VI
PRINCE EDWARD ISLAND													
Lennox Island	Lennox Island	P.E.I. Superintendency	John J. Sark	7	17	24	17	4	7	4	7	2	.....
NOVA SCOTIA													
Afton	Afton	Antigonish Co.	J. C. McDonald	10	10	20	10	9	2	4	2	.....	3
Eskasoni	Eskasoni	Cape Breton	Miss Mary McNeill	18	18	36	22	16	14	1	3	1	1
Sydney	Sydney	"	Miss Catherine Gallagher	16	12	28	13	11	4	6	2	5	.....
Millbrook	Millbrook	Colchester	Mrs. E. Smith	11	10	21	14	7	3	6	2	.....	3
Bear River	Bear River	Digby	Mrs. R. L. Ford	9	11	20	12	6	.....	3	5	3	3
Shubenacadie	Indian Brook	Hants	Mrs. A. King	9	3	12	7	4	4	.....	2	1	1
Malagawatch	Malagawatch	Inverness	Miss Mary Kennedy	6	6	12	9	3	5	3	1	.....	.....
Whycocomagh	Whycocomagh	"	Alex. Macdonald	20	19	39	22	17	10	2	8	1	1
Indian Cove	Fisher's Cove	Pictou	Miss G. McGirr	15	12	27	18	12	6	9	.....	.....	.....
Salmon River	Salmon River	Richmond Co.	J. H. Landry	8	21	29	13	18	4	1	2	.....	4
Middle River	Middle River	Victoria Co.	J. A. MacRae	12	15	27	13	11	3	7	1	4	1
Total, Nova Scotia				134	137	271	153	114	55	42	28	15	17
NEW BRUNSWICK													
Big Cove	Big Cove	Eastern	A. L. Fraser Mrs. A. L. Fraser	14	15	29	21	9	8	7	3	2	.....
Burnt Church	Burnt Church	"	Miss Marion Cahoon Miss Evelyn Cahoon	28	25	53	32	20	9	.....	14	4	6
Eel Ground	Eel Ground	"	Miss F. Sheasgreen	16	13	29	19	8	7	7	5	2	.....
Eel River	Eel River	"	Miss A. Tremblay	10	7	17	13	4	.....	6	3	3	1
Red Bank	Red Bank	"	Mrs. S. M. Kehoe	7	12	19	11	4	4	.....	5	4	2
Kingsclear	Kingsclear	Western	Miss E. M. O'Brien	6	7	13	11	7	.....	1	1	2	2
Oromocto	Oromocto	"	Miss A. Delaney	7	8	15	12	4	5	.....	5	1	.....
St. Mary's	St. Mary's	"	Miss M. T. Hughes	9	12	21	17	4	8	6	1	1	1
Woodstock	Woodstock	"	Rev. Sr. Mercia	11	11	22	15	7	8	2	2	3	.....
Tobique	Tobique	Northern	Rev. Sr. M. Faustina Sr. M. Francis de Sales Sr. M. of Victory Sr. Marie-Dolores	26	24	50	40	12	6	9	6	8	9
Total, New Brunswick				134	134	268	191	79	55	38	45	30	21

Quebec												
Bersimis	Bersimis	Bersimis	Sr. St. Raphael Sr. Marie du Cenacle	51	47	98	57	65	29	4		
Caughnawaga R.C.	Caughnawaga	Caughnawaga	Sr. Mary Rose Alma Sr. M. Louise Ida Sr. M. Albertus Sr. M. Claudine Sr. M. Agapit Sr. M. Bernadette Sr. M. Lea Sr. Mary Gertrude Sr. M. Eugene Sr. M. Angela Sr. M. Jeanne	143	173	316	270	76	54	60	57	24	45
Caughnawaga Bush	Caughnawaga	Caughnawaga	Mrs. A. Beauvais	16	14	30	23	8	4	6	8	4	
Caughnawaga St. Isidore	"	"	Miss M. Regis	12	11	23	18	12	6	3	2		
Caughnawaga Protestant	"	"	Lorenzo Big Canoe	20	17	37	28	12	8	5	4	5	3
Lorette	Lorette	Lorette	Sr. St. Agnes of Jesus Sr. St. Pierre	36	28	64	55	34	20	6	4		
Maria	Maria	Maria	Miss D. Gideon	12	13	25	19	3	7	8	3	2	2
Congo Bridge	Congo Bridge	Maniwaki	Miss H. J. White	8	10	18	11	9	8	1			
Maniwaki	Maniwaki	Maniwaki	Miss E. McGregor	21	15	36	18	16	5	8	2	5	
Oka Country	Oka	Oka	H. E. Eburne	11	18	29	21	16	4		4		5
Oka Village	"	"	Miss L. H. Oke	14	16	30	16	19	1	5	1	1	3
St. Frances R. C.	Pierreville	Pierreville	Sr. Mary Josephine Sr. Mary Ozoona Sr. St. Uldric	24	23	47	41	14	6	12	9	4	2
St. Frances C.E.	"	"	H. L. Masta	3	3	6	4	2		4			
Pointe Bleue	Pointe Bleue	Pointe Bleue	Sr. Aime de Jesus Sr. St. Jeanne	55	42	97	68	57	23	13	4		
Restigouche	Restigouche	Restigouche	Sr. Mary of St. Joseph Sr. M. of St. Luc Sr. M. of St. Viateur	48	66	114	71	31	28	31	15	9	
Chenail	St. Regis	St. Regis	Miss A. Robillard	16	8	24	16	16	3	5			
Chetlain	"	"	Miss G. Legarde	13	5	18	10	6	6	3	2	1	
Cornwall Island	"	"	F. Birns	22	25	47	20	36	8	2		1	
St. Regis Island	"	"	Miss M. Stacey	8	9	17	11	4	3	5	1	4	
St. Regis Village	"	"	Miss M. MacNulty Miss F. Morris	28	28	56	36	34	4	13	5		
Brennan Lake	At Brennan's Lake	Temiskaming	Miss M. Sauve	11	9	20	9	6	4	5	5		
Hunter's Point	At Hunter's Point	"	Miss A. Marcotte	9	6	15	7	3	1	6	3	2	
Long Point	At Long Point	"	Mrs. J. D. McLaren	21	16	37	18	27	4	1	2	3	
Temiskaming	Temiskaming	"	Miss C. Honan	20	18	38	20	13	7	8	4	6	
Waswanippi	At Waswanippi	"	H. G. Cartlidge	13	23	36	28	31	5				
Fort George	At Fort George	Treaty No. 9	J. T. Griffin	12	14	26	8	23	3				
Rupert's House	At Rupert's House	"	Geo. Morrow	23	44	67	21	58	6	1	2		
Barriere	At Barriere	Outside Treaty	Mrs. W. T. Burns Miss H. Stearns	12	8	20	16	12	6	2			
Mistassini	At Lake Mistassini	"	Chas. Iserhoff	27	27	54	51	15	27	12			
Obedjiwan	At Obedjiwan	"	Miss J. Vaillancourt Miss L. Hebert	13	15	28	18	28					
Weymontaching	At Weymontaching		Miss P. Aumond Miss E. Nadon	16	10	26	16	26					
Total, Quebec				738	761	1,499	1,025	712	290	229	137	71	60

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year ended March 31, 1928—*Continued*

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Standard					
				Boys	Girls	Total		I	II	III	IV	V	VI
ONTARIO													
Alnwick	Alnwick	Alnwick	Rev. H. Wilding	25	22	47	27	12	.....	9	15	8	3
Cape Croker	Cape Croker	Cape Croker	Miss M. Moffit	17	13	30	23	6	7	.....	7	5	5
Port Elgin	"	"	Miss C. E. Lett	6	11	17	10	6	2	1	5	3	.....
Sidney Bay	"	"	Miss M. McGarvey	6	7	13	9	5	1	2	5	.....	.....
Back Settlement	Caradoc	Caradoc	Miss H. M. Dingman	11	14	25	15	8	5	9	3	.....	.....
Bear Creek	"	"	Miss M. Baird	14	13	27	13	13	4	6	3	1	.....
Muncey	"	"	Mrs. E. Phillips	10	7	17	10	7	.....	4	.....	2	4
Oneida No. 2	Oneida	"	Miss E. Lowry	26	16	42	26	26	6	10	.....	.....	.....
Oneida No. 3	"	"	Miss E. Duckworth	16	20	36	16	23	4	5	3	1	.....
River Settlement	Caradoc	"	Miss L. G. Radford	11	13	24	13	7	1	5	11	.....	.....
Christian Island	Christian Island	Christian Island	R. Cowling	21	26	47	23	30	4	9	4	.....	.....
[1]Manitou Rapids	Manitou Rapids	Fort Frances	Miss O. Hayes	11	13	24	7	18	2	2	2	.....	.....
Lake Helen	At Lake Helen	Fort William	Miss E. Leusch	12	12	24	16	7	8	.....	4	.....	5
Mission Bay	Fort William	"	Miss C. M. Lavallee	7	11	18	15	7	5	6	.....	.....	.....
[1]Pic	Pic	"	Miss L. Kennedy	17	13	30	25	30	.....	.....	.....	.....	.....
[1]Sand Point	At Sand Point	"	Miss G. McAteer	15	11	26	20	26	.....	.....	.....	.....	.....
Batchawana	Batchawana Bay	Garden River	Miss E. M. Robicheau	7	4	11	8	4	2	.....	.....	1	4
Garden River, C. E.	Garden River	"	Miss J. Johnston	8	15	23	12	17	5	1	.....	.....	.....
Garden River, R. C.	"	"	Miss R. Chaput Miss ... Bush	26	23	49	28	22	5	16	5	1	.....
Goulais Bay	Goulais Bay	"	Miss M. A. Gagnon	15	12	27	20	9	12	5	1	.....	.....
Georgina Island	Georgina Island	Georgina Island	Rev. J. A. Ward	13	7	20	10	6	1	3	2	6	2
Golden Lake	Golden Lake	Golden Lake	Miss A. L. Costello	25	26	51	24	25	8	9	3	6	.....
Sheshegwaning, C. E.	Sheshegwaning	Gore Bay	R. K. Trowbridge	5	2	7	4	4	.....	.....	2	.....	1
Sheshegwaning, R. C.	"	"	Miss M. Hickey	6	8	14	8	5	.....	7	2	.....	.....
West Bay	West Bay	"	F. P. Cunningham	19	32	51	26	30	7	7	7	.....	.....
Whitefish Bay	Whitefish Bay	Kenora	D. Ducharme	15	14	29	19	9	4	8	8	.....	.....
Birch Island	Whitefish River	Manitowaning	Miss I. Malone	14	18	32	24	24	6	2	.....	.....	.....
Buzwah	Buzwah	"	Miss L. Sloan	15	11	26	17	18	6	2	.....	.....	.....
Kaboni	Kaboni	"	Miss M. Pleau	17	13	30	15	7	10	4	7	2	.....
Sheguiandah	Sheguiandah	"	Mrs. A. J. Abbot	11	10	21	11	15	4	1	1	.....	.....
Sucker Creek	Sucker Creek	"	Miss J. J. Weeks	7	6	13	9	7	1	2	3	.....	.....
Whitefish Lake	Whitefish Lake	"	Miss A. Manitowabi	8	12	20	11	9	6	3	2	.....	.....
Wikwemikong	Wikwemikong	"	Miss A. Straine Miss J. Charlebois	45	49	94	47	68	8	.....	6	6	6
Moraviantown	Moravian	Moravian	Rev. C. W. McKenzie	15	18	33	22	10	7	9	4	3	.....
New Credit	New Credit	New Credit	H. Klinck	17	10	27	19	10	2	1	3	5	6
Dokis	Dokis	Nipissing	B. Horan	15	15	30	20	19	2	3	6	.....	.....
Garden Village	Nipissing	"	Miss L. Addey	20	21	41	20	17	11	6	7	.....	.....
[1]Temogami	Bear Island	"	Miss I. Spotswood	12	15	27	16	22	3	2	.....	.....	.....
Gibson	Watha	Parry Sound	Rev. F. J. Reed	19	15	34	20	12	7	2	6	2	5
Lower French River	Lower French River	"	Miss E. Q. Daly	8	11	19	13	10	2	4	3	.....	.....
Maganetawan	Managetawan	"	Miss B. McCarthy	6	3	9	6	4	.....	3	2	.....	.....
Moose Deer Point	At Moose Deer Point	"	B. Sullivan	8	4	12	6	4	4	2	2	.....	.....
Ryerson	Parry Island	"	Miss I. P. McFarland	24	17	41	21	24	5	6	5	1	.....
Shawanaga	Shawanaga	Parry Sound	Mrs. E. English	15	24	39	21	14	10	4	7	4	.....

Rama	Rama	Rama	Mrs. J. Stickle	23	25	48	33	18	2	11	2	8	7
			Miss L. Ivory										
Mud Lake	Mud Lake	Rice Lake	M. Lewis	31	28	59	41	30	11	13	5		
			Miss V. Lewis										
Kettle Point	Kettle Point	Sarnia	H. D. Watts	27	14	41	19	11	11	13	4	2	
St. Clair	St. Clair	"	W. E. Windover	19	22	41	31	20	7	8	1	5	
Stoney Point	Stoney Point	"	Miss M. Sheppard	9	7	16	9	5	4	5	2		
French Bay	Saugeen	Saugeen	F. H. Gentleman	7	7	14	8	8	3	3			
Saugeen	"	"	W. M. Kinechtel	14	9	23	16	11	2	4		6	
Scotch Settlement	"	"	Mrs. B. Robb	18	10	28	20	18	2	4	4		
Six Nations No. 1	Six Nations	Six Nations	Miss J. Jamieson	25	27	52	32	10	5	16	12	9	
" 2	"	"	Miss M. Jamieson	31	44	75	52	13	27	24	1	10	
			Miss N. E. Jamieson										
" 3	"	"	Miss E. Green	31	36	67	39	5	17	5	1	13	26
" 4	"	"	Miss E. Miller	18	9	27	21	3	1	9	6	4	4
" 5	"	"	Miss M. Frohman	19	18	37	22	14	3	4	6	7	3
" 6	"	"	Miss M. Hill	11	25	36	19	10	6	13	6	1	
" 7	"	"	Miss V. Davis	30	27	57	36	20	10	12	10	5	
" 8	"	"	Miss W. G. Smith	9	16	25	17	13	3		6	3	
" 9	"	"	Miss E. C. General	20	19	39	24	14	5	3	4	3	10
" 10	"	"	Miss V. Hill	32	33	65	38	11	2	15	11	8	18
" 11	"	"	W. Loft	52	37	89	51	24	7	13	16	11	18
			Miss G. Atkins										
[1]Spanish Protestant	Spanish River	Thessalon	Miss J. Buell	6	5	11	7	11					
Mississauga River	Mississauga	Thessalon	Miss M. A. McDermott	9	15	24	11	19	2		3		
Sagamook	Spanish River	"	Miss H. Connolly	7	7	14	7	11		2	1		
Serpent River	Kenabutch	"	Miss J. McDermott	13	22	35	21	15	8	4	6	2	
[2]Abitibi	At Abitibi	Treaty No. 9	Miss M. McBride	27	8	35	19	29	6				
Albany River	At Albany River	" 9	Rev. P. A. Northam	24	28	52	24	10	2	13	8	8	11
[2]English River	At English River	" 9	J. T. Walker	16	15	31	24	31					
[2]Fort Hope	At Fort Hope	" 9	Rev. G. Macdonald	9	2	11	9	6	3	2			
Moose Fort	At Moose Fort	" 9	S. Waller	19	21	40	32	20	11	4	4	1	
Tyendinaga Central	Tyendinaga	Tyendinaga	Mrs. C. Fyle	13	10	23	16	9	6	3	4	1	
Tyendinaga Eastern	"	"	Miss M. Stoddart	31	29	60	32	22	10	14	8	6	
Tyendinaga Mission	"	"	Miss K. Robinson	12	15	27	17	15	7	4		1	
Tyendinaga Western	"	"	Miss L. M. Bell	11	13	24	13	7	8	2	5	2	
Walpole Island No. 1	Walpole Island	Walpole Island	Mrs. H. Macpherson	37	33	70	52	35	18	14	3		
			Mrs. E. McDougall										
Walpole Island No. 2	"	"	Mrs. A. George	24	13	37	23	21	10	4	2		
Total, Ontario				1,324	1,286	2,610	1,560	1,175	406	421	297	173	138
Manitoba													
Berens River (United Ch.)	Berens River	Clandeboye	C. D. Street	26	12	38	27	18	7		7	6	
Berens River (R.C.)	"	"	Rev. F. Leach, O.M.I.	12	13	25	15	8	9	3			5
Black River	Black River	"	G. Slater	4	4	8	4	6		1	1		
Brokenhead	Brokenhead	"	Rev. T. D. Conlin	13	11	24	14	15	5	1	3		
Bloodvein	Bloodvein	"	Miss P. Fuller	10	16	26	9	7	3	7	5	4	
Fort Alexander (Upper)	Fort Alexander	"	Mrs. C. R. Harbord	16	14	30	15	24	4	2			
Grand Rapids	Grand Rapids	"	Mrs. C. Wyatt	7	11	18	13	8	2	4	4		
Hollowwater River	Hollowwater River	"	Rev. C. W. Gardner	3	17	20	11	17	3				
Little Grand Rapids (United Ch.)	Little Grand Rapids	"	L. Schuetze	12	13	25	11	25					
Little Grand Rapids (R.C.)	" "	"	B. Guimond	7	20	27	15	27					
Poplar River	Poplar River	"	Mrs. C. Caldwell	13	10	23	13	17	3	2	1		
Fisher River	Fisher River	Fisher River	W. G. Tong	48	39	87	48	28	20	17	10	6	6
			Mrs. W. G. Tong										
Peguis Centre	Peguis	"	Miss I. Fairservice	17	12	29	14	18	5	5		1	

Notes:—[1]School closed December 31, 1927. — [2]Summer School.— [3]School re-opened February 1, 1928.

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year ended March 31, 1928—*Continued*

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Standard					
				Boys	Girls	Total		I	II	III	IV	V	VI
MANITOBA—*Concluded*													
Peguis North	"	"	Mrs. C. Morris	13	14	27	14	18	5	4			
Peguis South	"	"	A. H. Packer	19	24	43	15	25	6	4	6	2	
Oak River Sioux	Oak River	Griswold	Miss W. Stapleton	16	8	24	14	21	3				
Ebb and Flow Lake	Ebb and Flow	Manitowapah	Miss M. Gorman	16	11	27	19	8	5	6	5	3	
Fairford	Fairford	"	Miss O. Thomas Miss C. McCabe	36	28	64	40	30	18	8	7	1	
Lake Manitoba	Lake Manitoba	"	Miss M. J. Sanregret	9	18	27	16	23	2	2			
Lake St. Martin	Lake St. Martin	"	C. Garwood	25	18	43	22	21	13	9			
Little Saskatchewan	Little Saskatchewan	"	A. R. Wheadon	10	11	21	16	15	2	2	2		
Pine Creek	Pine Creek	"	Rev. J. Brachet, O.M.I	5	9	14	7	14					
Shoal River	Shoal River	"	C. E. Cooke Mrs. C. E. Cooke	16	22	38	19	30	3	3	2		
Waterhen River	Waterhen	"	A. D'Aoust	10	9	19	15	7	5	6	1		
Cross Lake	Cross Lake	Norway House	H. Lousley	6	4	10	6	6	1	2	1		
God's Lake	God's Lake	"	P. J. Lake	12	16	28	14	10		8	1	9	
Island Lake	Island Lake	"	T. F. Cuddy	22	15	37	11	37					
Jackhead	Jackhead	"	J. Everett	11	13	24	13	11	3	4	5	1	
Jack River C.E	Norway House	"	Miss M. E. Bagshaw	25	13	38	20	13	9	13		3	
Jack River, R. C	"	"	Sr. Ste. Eugenie	13	13	26	15	12	4	3	7		
Oxford House	At Oxford House	"	N. Gaudin	22	26	48	15	32	10	2	4		
Rossville	Norway House	"	Miss V. Blackford	11	13	24	12	14	4	2	3	1	
York Factory	At York Factory	"	E. W. Gardner	14	13	27	17	19	8				
Big Eddy	Pas	Pas	Miss L. Millen	17	12	29	20	15	5	6	2	1	
Chemahawin	Chemahawin	"	D. Banks	11	7	18	10	13	4	1			
Nelson Nouse (United Ch.)	Nelson House	"	Chas. Clay	6	12	18	7	16	1	1			
[1]Nelson House (R.C.)	"	"	Paul Sicotte	11	7	18	11	10	3	5			
Pas	Pas	"	I. P. Humberstone	21	12	33	24	14	9	10			
Pine Bluff	Pine Bluff	"	Paul Sicotte	6	7	13	10	5	1	3	4		
Red Earth	Red Earth	"	I. T. Blewett	15	9	24	17	4	3	3	7	5	2
Shoal Lake	Shoal Lake	"	F. J. Daniels	8	5	13	7	6	2	2	3		
Split Lake	Split Lake	"	H. Cannon	36	27	63	20	63					
Swan Lake	Swan Lake	Portage la Prairie	Rev. J. E. Cooper	15	13	28	19	12	11	4			1
Total, Manitoba				645	601	1,246	674	742	201	155	91	43	14
SASKATCHEWAN													
Assiniboine	Assiniboine	Assiniboine	Rev. W. Millar	11	18	29	15	13	3	6		7	
Little Pines	Little Pines	Battleford	Miss A. L. Cunningham Miss I. M. Faithfull	18	14	32	26	7	10	9	5	1	
Red Pheasant	Red Pheasant	"	H. Reynolds	16	11	27	15	26	1				
Ahtahkakoops	Ahtahkakoops	Carlton	E. B. Goodman	8	7	15	9	7	3	1		4	
Big River	Big River	"	J. R. Settee	10	15	25	14	9	4	9	3		

Note: [1]School closed June 30, 1927.

Montreal Lake	Montreal Lake	"	J. L. Lowe	23	16	39	25	26	6	7			
Sturgeon Lake	Wm. Twatt's	"	H. W. Shaw	12	15	27	11	15	7	2	3		
Fort-a-la Corne South	James Smith	Duck Lake	Mrs. M. Burbridge	16	16	32	25	31	1				
James Smith	James Smith	"	Rev. E. V. Bird	10	10	20	13	11	5	2		2	
John Smith	John Smith	"	Rev. G. J. Waite	10	6	16	12	8		4	3	1	
White Bear's	White Bear's	Moose Mountain	Rev. C. B. Kerr	14	9	23	14	10	5	4	4		
Whitecap Sioux	Moose Woods	Moose Woods	Mrs. A. L. Fakeley	4	8	12	8	8	3	1			
Cold Lake	Cold Lake	Onion Lake	Chas. Hebert Mrs. Chas. Hebert	14	12	26	13	18	5	3			
Frog Lake	Frog Lake	"	A. E. Peterson	15	6	21	8	10	3	7	1		
Long Lake	Keeheewin's	"	J. F. Dion Mrs. J. F. Dion	9	6	15	6	9	3	3			
Cote's	Cote's	Pelly	Mrs. D. R. Fraser Miss C. Templeton	19	10	29	20	14	6	7	2		
[1]Keeseekouse	Keeseekouse	"	G. Barton	10	8	18	6	12	3	3			
Key's	Key's	"	W. J. Kerley	6	4	10	8	3	2	1	1	2	1
Day Star's	Day Star's	Touchwood	Mrs. L. M. Jolly	8	6	14	12	9	2	2	1		
Fishing Lake	Fishing Lake	"	Rev. A. L. Lawes	12	11	23	15	10	8	5			
[2]Pelican Narrows	Pelican Narrows	Treaty 10	G. O. Lee	13	15	28	18	18	10				
[2]Stanley	Stanley	"	Miss B. B. Allcock	20	21	41	19	39	2				
Total, Saskatchewan				278	244	522	312	313	92	76	23	17	1
Alberta													
Sarcee	Sarcee	Sarcee	Miss W. Tims	10	16	26	17	8	4	2	2	6	4
Total, Alberta				10	16	26	17	8	4	2	2	6	4
Northwest Territories													
Aklavik	At Aklavik	Fort Simpson	Rev. E. Hester	21	30	51	25	25	18	5	3		
Fort McPherson	At Fort McPherson	"	Rev. S. C. Deacon	3	24	27	10	10	4	5	2	2	4
Fort Simpson	At Fort Simpson	"	Sr. A. Gamache	12	13	25	20	10	6	1	4		4
St. David's Mission	At St. David's Mission	"	Rev. F. Clarke	7	12	19	6	15	4				
Fort Smith	At Fort Smith	Fort Smith	Sr. Gadbois	4	2	6	4	3	1	2			
Total, Northwest Territories				47	81	128	65	63	33	13	9	2	8
British Columbia													
Fort Babine	Fort Babine	Babine	J. F. Morrissey	13	28	41	15	13	15	8	5		
Glen Vowell	Secevach	"	R. Boyes	11	11	22	7	14	2	5	1		
Hazelton	Hazelton	Babine	Mrs. E. Dungate	17	14	31	15	22	2	7			
Kispiox	Kispiox	"	Miss I. Morrice	11	14	25	12	19		4	2		
Kitsegukla	Kitsegukla	"	Miss M. B. Wright	13	13	26	9	16		4	6		
Kitwanga	Kitwanga	"	Mrs. M. Ashmore	21	23	44	10	25	11	5	2	1	
Rocher Deboule	Hagwilget	"	S. Browning Mrs. S. Browning	10	8	18	14	6	2	5	3	2	
Bella Bella	Bella Bella	Bella Coola	Miss J. Follett	19	34	53	12	47	4		1	1	
Bella Coola	Bella Coola	"	Mrs. I. Snodgrass	13	14	27	12	11	10	6			
Kitamaat	Kitamaat	"	Mrs. H. A. Glaspell	19	19	38	13	19	7	5	5	2	
Klemtu	Klemtu	"	Miss B. Rendle	11	8	19	14	15		2	2		
Cowichan	Cowichan	Cowichan	Mrs. K. A. Fitzgerald	13	13	26	6	20	6				
Koksilah	Kohsilah	"	Miss A. M. Cliff	6	14	20	7	18	2				
Nanaimo	Nanaimo	"	Miss E. S. Klippert	25	14	39	22	16	7	4	4	5	3
Songhees	Somenos	"	Miss J. Hindle	7	8	15	6	7	1	1	5		1

Notes: [1]School closed December 31, 1927.— [2]Summer School.

SCHOOL STATEMENT

STATEMENT of Indian Day Schools in the Dominion for the Fiscal Year ended March 31, 1928—*Concluded*

School	Reserve	Agency	Teacher	Number on Roll			Average Attendance	Standard					
				Boys	Girls	Total		I	II	III	IV	V	VI
BRITISH COLUMBIA—*Concluded*													
Shulus	Nicola Maneet	Kamloops	A. E. Fyall	7	7	14	8	10		4			
Alert Bay	Nimkish	Kwakwelth	G. M. Luther	17	16	33	21	21	8	1	1	2	
Cape Mudge	Cape Mudge	"	Mrs. S. Howard	10	12	22	11	13	4		5		
Boothroyd	Boothroyd	Lytton	Miss L. Blachford	7	9	16	11	2	2	5	3	4	
Seabird Island	Seabird Island	"	Miss M. E. Carpentier	8	9	17	8	10	4		3		
Seton Lake	Seton Lake	"	J. P. Kieran	4	6	10	6	4	2	2		2	
Chehalis	Chehalis	New Westminster	J. W. Burns	6	8	14	10	7	2	1	3	1	
Katzie	Katzie	"	Miss M. Boeurs	9	8	17	11	7	3	5	1		1
Skwah	Skwah	"	J. J. Maroney	18	14	32	22	5	4	8	4	4	7
Okanagan	Okanagan	Okanagan	F. G. M. Grist	11	8	19	11	3	4	9	3		
Osoyoos	Osoyoos	"	Miss M. Wadel	7	3	10	8	3	2	3		1	1
Penticton	Penticton	"	Miss H. Pelter	10	4	14	7	3	5	1	3	2	
Massett	Massett	Queen Charlotte	Miss S. Shopland Miss D. S. Shopland	57	48	105	45	66	10	16	9	4	
Skidegate	Skidegate	"	Miss M. M. McRae	23	19	42	36	21	15	2	2	1	
Gitladamicks	Kitladamax	Skeena	Mrs. M. S. Studdy	19	18	37	20	15	5	9	6	2	
Hartley Bay	Hartley Bay	"	J. Oliver	13	9	22	10	16	3	3			
Kincolith	Kincolith	"	Miss H. Green	23	22	45	15	34	7	4			
Kitkatla	Kitkatla	"	F. C. Freeman	21	26	47	22	34	7	5	1		
Kitselas	Kitselas	"	C. M. McKinnon	11	14	25	11	13	1	8	3		
Lakalsap	Lakalsap	"	Mrs. I. Moore	18	23	41	15	35	4	2			
Metlakatla	Metlakatla	"	T. A. Bryant	15	16	31	16	10	7	7	5	2	
Port Essington	Port Essington	"	Miss H. J. Hare	11	18	29	15	13	3		9	4	
Port Simpson	Port Simpson	"	Miss A. MacKay Miss H. Nightingale	37	46	83	36	36	14	7	11	3	12
Homalco	Aupe	Vancouver	A. H. Garland Mrs. A. H. Garland	14	15	29	15	17	8	4			
Sliammon	Sliammon	"	B. Nicholson	4	8	12	6	9	1	2			
Squamish	Squamish	"	Sr. Mary Amy	9	18	27	21	20	3	2	1		1
Ucluelet	Itedse	West Coast	D. McDevitt	16	14	30	13	26	2	1	1		
Total, British Columbia				614	653	1,267	604	721	199	167	110	43	27
YUKON													
Champagne Landing	At Champagne Landing	Yukon	A. J. Stringer	20	20	40	5	40					
Little Salmon	At Little Salmon	"	W. Firksey	20	13	33	8	5	10	11	5	2	
Moosehide	At Moosehide	"	W. D. Young	4	13	17	10	9	3	5			
Old Crow Village	At Old Crow Village	"	Rev. A. C. McCullum	12	12	24	17	5	6	7	6		
Selkirk	At Selkirk	"	Miss K. Martin	9	11	20	8	20					
Teslin Lake	At Teslin Lake	"	J. Morris	19	8	27	17	22	3	2			
Whitehorse	At Whitehorse	"	Mrs. G. H. Daimpre	7	7	14	5	14					
Total, Yukon				91	84	175	70	115	22	25	11	2	

SCHOOL STATEMENT

STATEMENT of Indian Residential Schools in the Dominion for the Fiscal Year ended March 31, 1928

School	Post Office Address	Agency	Principal	Denomination	Number on Roll			Average Attendance	Standard					
					Boys	Girls	Total		I	II	III	IV	V	VI
ONTARIO														
Albany Mission	Fort Albany	Treaty No. 9	Rev. A. Bilodeau, O.M.I.	Roman Catholic	11	19	30	30	13	15	1	1	.....	.....
Cecilia Jeffrey	Indian Bay, Man.	Kenora	Rev. A. D. Menzies	Presbyterian	31	42	73	68	34	6	1	9	7	16
Chapleau	Chapleau	Chapleau	Rev. A. J. Vale	Church of England	69	51	120	101	58	13	14	28	5	2
Fort Frances	Fort Frances	Fort Frances	Rev. S. Perreault, O.M.I.	Roman Catholic	35	59	94	85	31	14	14	15	10	10
Fort William	Fort William	Fort William	Sr. M. St. George	Roman Catholic	30	29	59	41	37	11	4	5	2	.....
Kenora	Kenora	Kenora	Rev. J. E. Baillargeon, O.M.I.	Roman Catholic	29	48	77	68	46	13	6	6	2	4
Mohawk	Brantford	Six Nations	Sydney Rogers	Church of England	53	83	136	123	5	24	22	33	16	36
Moose Fort	Moose Fort	Treaty No. 9	Rev. J. A. Maggrah	Church of England	15	16	31	28	15	10	5	1	.....	.....
Mount Elgin	Muncey		Rev. S. R. McVitty	United Church	66	81	147	139	31	32	51	22	11	.....
McIntosh	McIntosh	Savanne	Rev. C. Perreault	Roman Catholic	26	35	61	50	30	24	7	.....	.....	.....
Shingwauk Home	Sault Ste. Marie	Sault Ste. Marie	Rev. B. P. Fuller	Church of England	37	46	83	74	18	5	15	17	16	12
Spanish	Spanish		Rev. Chas. Belanger, S.J.	Roman Catholic	119	121	240	231	68	59	46	34	33	.....
Total, Ontario					521	630	1,151	1,038	386	226	186	171	102	80
MANITOBA														
Birtle	Birtle	Birtle	Rev. D. B. Currie	Presbyterian	37	55	92	82	36	7	10	8	11	20
Brandon	Brandon		Rev. T. Ferrier	United Church	71	70	141	135	51	14	13	14	16	33
Cross Lake	Cross Lake	Norway House	Rev. G. E. Trudeau	Roman Catholic	51	51	103	98	28	15	14	19	20	7
Elkhorn	Elkhorn		Rev. F. Eley	Church of England	73	58	131	112	53	18	19	15	15	11
Fort Alexander	Fort Alexander	Clandeboye	Rev. M. Kalmes, O.M.I.	Roman Catholic	41	47	88	80	22	24	18	7	10	7
MacKay	The Pas	Pas	F. Turner (Acting)	Church of England	47	43	90	81	33	6	18	14	10	9
Norway House	Norway House	Norway House	J. T. Blackford	United Church	51	57	108	103	28	11	24	22	14	9
Pine Creek	Camperville	Manitowapah	Rev. J Brachet, O.M.I.	Roman Catholic	39	46	85	80	38	7	16	16	8	.....
Portage la Prairie	Portage la Prairie	Portage la Prairie	Rev. W. A. Hendry	United Church	45	58	103	96	27	3	12	25	14	22
Sandy Bay	Marius	Manitowapah	Rev. O. Chagnon, O.M.I.	Roman Catholic	40	47	87	71	19	31	20	13	4	.....
Total, Manitoba					496	532	1,028	938	335	136	164	153	122	118

[1] Owing to destruction of building by fire, school disorganized.

SCHOOL STATEMENT

STATEMENT of Indian Residential Schools in the Dominion for the Fiscal Year ended March 31, 1928—*Concluded*

School	Post Office Address	Agency	Principal	Denomination	Number on Roll			Average Attendance	Standard					
					Boys	Girls	Total		I	II	III	IV	V	VI
SASKATCHEWAN														
(1)Beauval	Beauval	Treaty No. 10	Rev. C. M. Adam, O.M.I.	Roman Catholic	2	24	26	25	6	6	8	2	4	.....
Cowesses	Marieval	Crooked Lake	Rev. J. Carriere, O.M.I.	Roman Catholic	37	48	85	77	26	12	11	16	11	9
Duck Lake	Duck Lake	Duck Lake	Rev. H. Delmas, O.M.I.	Roman Catholic	79	73	152	148	46	28	22	25	17	14
File Hills	Balcarres	File Hills	Frank Rhodes	United Church	45	48	93	85	26	7	5	11	15	29
Gordon's	Punnichy	Touchwood	Canon J. K. Irwin	Church of England	53	54	107	105	33	3	14	15	25	17
Guy	Sturgeon Landing	.....	Rev. N. Doyon, O.M.I.	Roman Catholic	60	53	113	88	101	8	4	.....	.....	.....
Lac La Ronge	Lac La Ronge	Treaty No. 10	Rev. C. F. Hives	Church of England	48	62	110	100	35	23	15	24	13	.....
Muscowequan	Lestock	Touchwood	Rev. J. Poulet, O.M.I.	Roman Catholic	37	32	69	63	23	22	14	8	2	.....
Onion Lake C.E.	Onion Lake	Onion Lake	Rev. H. Ellis	Church of England	43	40	83	78	18	6	15	30	8	6
Onion Lake R.C.	Onion Lake	Onion Lake	Rev. J. A. Thevien, O.M.I.	Roman Catholic	43	33	76	65	35	9	15	5	6	6
Qu'Appelle	Lebret	.....	Rev. G. Leonard, O.M.I	Roman Catholic	128	149	277	214	87	49	36	23	26	56
Round Lake	Stockholm	Crooked Lake	Rev. R. J. Ross	United Church	38	47	85	72	34	16	8	14	11	8
Thunderchild	Delmas	Battleford	Rev. J. Portier, O.M.I.	Roman Catholic	57	62	119	111	23	28	13	40	11	4
Total, Saskatchewan					670	725	1,395	1,231	493	211	180	213	149	149
ALBERTA														
Blood	Standoff	Blood	Rev. E. Ruaux, O.M.I.	Roman Catholic	60	62	122	112	48	21	22	9	14	8
Blue Quills	Sacred Heart	Saddle Lake	Rev. V. Gabillon, O.M.I.	Roman Catholic	41	35	76	66	27	8	15	12	11	3
Crowfoot	Cluny	Blackfoot	Rev. J. Riou, O.M.I.	Roman Catholic	30	40	70	63	25	10	5	15	7	8
Edmonton	Edmonton	.....	Rev. J. F. Woodsworth	United Church	59	57	116	109	27	20	26	21	15	7
Ermineskins	Hobbema	Hobbema	Rev. P. P. Moulin, O.M.I.	Roman Catholic	64	56	120	109	32	28	28	23	2	7
Holy Angels	Fort Chipewyan	Fort Smith	Sr. M. Z. Dufault	Roman Catholic	15	29	44	41	29	3	9	3	.....	.....
Lesser Slave Lake	Grouard	Treaty No. 8	Rev. W. J. Kent	Church of England	7	10	17	15	1	4	2	4	4	2
Morley	Morley	Stoney	Rev. E. J. Staley	United Church	30	33	63	59	35	10	18	.....	.....	.....
Old Sun's	Gleichen	Blackfoot	Rev. F. M. Ross-Gibney.	Church of England	43	36	79	75	31	12	14	10	8	4
Sacred Heart	Brocket	Peigan	Rev. J. L. Levern, O.M.I.	Roman Catholic	26	22	48	42	22	1	9	7	5	4
St. Albert	St. Albert	.....	Sr. Gosselin	Roman Catholic	50	56	106	103	44	9	15	18	8	12
St. Bernard	Grouard	Treaty No. 8	Rev. Y. M. Floch, O.M.I.	Roman Catholic	35	41	76	57	35	17	11	3	9	1
St. Bruno	Grouard	Treaty No. 8	Rev. J. B. H. Giroux, O.M.I.	Roman Catholic	57	53	110	95	27	32	17	19	15	.....
St. Cyprian	Brocket	Peigan	Vivian S. Lord	Church of England	18	18	36	31	12	3	.....	8	4	9
St. Paul's	Cardston	Blood	Rev. S. Middleton	Church of England	47	81	128	117	37	20	28	16	21	6

Sturgeon Lake	Calais	Treaty No. 8	Rev. C. Batie, O.M.I.	Roman Catholic	38	39	77	69	25	18	10	11	9	4
Vermilion	Fort Vermilion	Treaty No. 8	Rev. Jos. Habay, O.M.I.	Roman Catholic	17	11	28	14	20	2	1	1	2	2
Wabasca C.E.	Wabasca	Treaty No. 8	Rev. F. Longmore	Church of England	11	10	21	19	8	1	3	7	1	1
Wabasca R.C.	Wabasca	Treaty No. 8	Rev. A. Rault, O.M.I.	Roman Catholic	22	23	45	39	12	9	4	8	8	4
Whitefish Lake	Grouard	Treaty No. 8	Rev. C. D. White	Church of England	9	15	24	21	4	5	4	6	5	.....
Total, Alberta					679	727	1,406	1,256	501	233	241	201	148	82
Northwest Territories														
Aklavik	Aklavik		Sr. A. McQuillan	Roman Catholic	20	13	33	27	17	4	12	.....	.....	.....
Fort Resolution	Fort Resolution	Fort Resolution	Sr. J. Dussault	Roman Catholic	18	33	51	40	27	5	12	6	1	.....
Hay River	Hay River	Fort Resolution	Rev. W. B. Singleton	Church of England	23	26	49	38	36	3	5	.....	5	.....
Providence Mission	Providence Mission	Fort Resolution	Sr. St. Rose of Lima	Roman Catholic	23	28	51	43	16	10	8	6	11	.....
Total, Northwest Territories					84	100	184	148	96	22	37	12	17	.....
British Columbia														
Ahousaht	Ahousaht	West Coast	Rev. J. L. Millar	United Church	25	18	43	41	3	7	15	8	2	8
Alberni	Alberni	West Coast	Rev. F. E. Pitts	United Church	51	50	101	87	39	19	15	17	7	4
Alert Bay	Alert Bay	Kwakwelth	F. Earl Anfield	Church of England	45	45	90	73	24	15	17	15	13	6
Cariboo	150 Mile House	Williams Lake	Rev. V. Rohr	Roman Catholic	40	64	104	99	38	12	18	17	11	8
Christie	Kakawis	West Coast	Rev. I. Calmes, O.S.B.	Roman Catholic	42	46	88	77	31	29	9	3	16	.....
Coqualeetza	Sardis	New Westminster	Rev. G. H. Raley	United Church	143	118	261	211	86	51	59	22	26	17
Fraser Lake	Lejac	Stuart Lake	Rev. N. Coccola, O.M.I.	Roman Catholic	73	81	154	149	62	15	25	19	16	17
Kamloops	Kamloops	Kamloops	Rev. J. Duplanil, O.M.I.	Roman Catholic	63	77	140	113	57	38	22	13	8	2
Kitamat	Kitamat	Bella Coola	Miss T. B. Anderson	United Church	4	16	20	12	3	5	4	6	2	.....
Kootenay	Cranbrook	Kootenay	Rev. M. Lepine, O.M.I.	Roman Catholic	33	52	85	75	30	11	24	8	6	6
Kuper Island	Kuper Island	Cowichan	Rev. Jos. Guerts, S.M.M	Roman Catholic	43	49	92	81	33	23	14	8	14	.....
Port Simpson	Port Simpson	Skeena	Miss L. M. Deacon	United Church	.....	19	19	17	1	2	1	3	3	9
Sechelt	Sechelt	Vancouver	Rev. Jas. McCaffrey	Roman Catholic	44	45	89	80	40	9	23	4	8	5
Squamish	N. Vancouver	Vancouver	Sr. Mary Amy	Roman Catholic	25	27	52	51	17	7	4	8	4	12
(1)St. George's	Lytton	Lytton	Rev. A. R. Lett	Church of England	56	51	107	97	27	9	21	20	13	17
St. Mary's Mission	Mission City	New Westminster	Rev. H. J. Barney	Roman Catholic	61	59	120	109	48	50	17	2	2	1
Total, British Columbia					748	817	1,565	1,372	539	302	288	173	151	112
Yukon														
Carcross	Carcross	Yukon	Rev. W. Tinney	Church of England	18	18	36	32	5	5	18	6	2	.....
St. Paul's Hostel	Dawson	Yukon	C. F. Johnson	Church of England	12	18	30	28	10	5	5	3	3	4
Total, Yukon					30	36	66	60	15	10	23	9	5	4

[1] Formerly called Lytton.

SCHOOL STATEMENT

STATEMENT of Combined Public and Indian Day Schools in the Dominion, at which Indian Children attend, for the Fiscal Year ended March 31, 1928

School	Reserve	Agency	Number on Roll			Average Attendance	Standard					
			Boys	Girls	Total		I	II	III	IV	V	VI
QUEBEC												
Kippewa	At Kippewa	Temiskaming	7	10	17	12	5	4	4	2	2	.....
Moisie	At Moisie River	Seven Islands	6	11	17	12	13	4	.....	.....	.....	.....
Hunter's Point	At Hunter's Point	Temiskaming	9	12	21	18	1	2	6	1	4	7
Power House	Near Angliers	Temiskaming	3	1	4	3	4	.....	.....	.....	.....	.....
Total, Quebec			25	34	59	45	23	10	10	3	6	7
ONTARIO												
Calabogie	At Calabogie	Golden Lake	.....	1	1	1	1	1	.....	.....	.....	.....
Hiawatha	Near Keene	Rice Lake	4	9	13	9	4	3	.....	.....	.....	6
Mattawa	At Mattawa	Nipissing	26	32	58	44	32	8	7	7	4	.....
Total, Ontario			30	42	72	54	36	12	7	7	4	6
MANITOBA												
Moose Lake	At Moose Lake	Pas	8	8	16	11	9	2	3	2	.....	.....
Patapun	At Patapun	Clandeboye	3	1	4	3	.....	2	.....	1	.....	1
Total, Manitoba			11	9	20	14	9	4	3	3	.....	1
SASKATCHEWAN												
Round Plain	Near Prince Albert	Carlton	2	9	11	5	2	4	.....	5	.....	.....
BRITISH COLUMBIA												
Telegraph Creek	At Telegraph Creek	Stikine	4	10	14	4	13	1	.....	.....	.....	.....
West Bank	At West Bank	Okanagan	5	6	11	4	4	2	.....	5	.....	.....
Total, British Columbia			9	16	25	8	17	3	.....	5	.....	.....

SCHOOL STATEMENT

STATEMENT showing the enrolment by Provinces in the different classes of schools for the Fiscal Year ended March 31, 1928

RESIDENTIAL SCHOOLS

Province	Number of Schools	Denomination				Number on Roll			Average attendance	Percentage of attendance	Standard					
		Church of England	Presbyterian	Roman Catholic	United Church	Boys	Girls	Total			I	II	III	IV	V	VI
Ontario	12	4	1	6	1	521	630	1,151	1,038	90·18	386	226	186	171	102	80
Manitoba	10	2	1	3	4	496	532	1,028	938	91·24	335	136	164	153	122	118
Saskatchewan	13	3	.....	8	2	670	725	1,395	1,231	88·24	493	211	180	213	149	149
Alberta	20	6	.....	12	2	679	727	1,406	1,256	86·48	501	233	241	201	148	82
Northwest Territories	4	1	.....	3	.....	84	100	184	148	80·43	96	22	37	12	17	.....
British Columbia	16	2	.....	9	5	748	817	1,565	1,372	87·66	539	302	288	173	151	112
Yukon	2	2	.....	.....	.....	30	36	66	60	90.90	15	10	23	9	5	4
Total, Residential Schools	77	20	2	41	14	3,228	3,567	6,795	6,043	88·93	2,365	1,140	1,119	932	694	545

DAY SCHOOLS

Province	Number of Schools	Number on Roll			Average attendance	Percentage of attendance	Standard					
		Boys	Girls	Total			I	II	III	IV	V	VI
Prince Edward Island	1	7	17	24	17	70·83	4	7	4	7	2	.....
Nova Scotia	11	134	137	271	153	56·45	114	55	52	28	15	17
New Brunswick	10	134	134	268	191	71·26	79	55	38	45	30	21
Quebec	31	738	761	1,499	1,025	68·37	712	290	229	137	71	60
Ontario	78	1,324	1,286	2,610	1,569	60·11	1,175	406	421	297	173	138
Manitoba	43	645	601	1,246	674	52·48	742	201	155	91	43	14
Saskatchewan	22	278	244	522	312	59·77	313	92	76	23	17	1
Alberta	1	10	16	26	17	65·38	8	4	2	2	6	4
Northwest Territories	5	47	81	128	65	50·79	63	33	13	9	2	8
British Columbia	42	614	653	1,267	604	47·67	721	199	167	110	43	27
Yukon	7	91	84	175	70	40·00	115	22	25	11	2	.....
Total, Day Schools	251	4,022	4,014	8,036	4,697	58·45	4,046	1,364	1,172	760	404	290

COMBINED WHITE AND INDIAN SCHOOLS

Quebec	4	25	34	59	45	76·27	23	10	10	3	6	7
Ontario	3	30	42	72	54	75·00	36	12	7	7	4	6
Manitoba	2	11	9	20	14	70·00	9	4	3	3	.....	1
Saskatchewan	1	2	9	11	5	45·45	2	4	.....	5	.....	.....
British Columbia	2	9	16	25	8	32·00	17	3	.....	5	.....	.....
Total, Combined Schools	12	77	110	187	126	67·37	87	33	20	23	10	14

SUMMARY OF SCHOOL STATEMENT

Province	Class of Schools			Total Number of Schools	Number on Roll			Average attendance	Percentage of attendance	Standard					
	Day	Residential	Combined		Boys	Girls	Total			I	II	III	IV	V	VI
Prince Edward Island	1	.....	.....	1	7	17	24	17	70·83	4	7	4	7	2	.....
Nova Scotia	11	.....	.....	11	134	137	271	153	56·45	114	55	42	28	15	17
New Brunswick	10	.....	.....	10	134	134	268	191	71·26	79	55	38	45	30	21
Quebec	31	.....	4	35	763	795	1,558	1,070	68·67	735	300	239	140	77	67
Ontario	78	12	3	93	1,875	1,958	3,833	2,661	69·47	1,597	644	614	475	279	224
Manitoba	43	10	2	55	1,152	1,142	2,294	1,626	70·88	1,086	341	322	247	165	133
Saskatchewan	22	13	1	36	950	978	1,928	1,548	80·29	808	307	256	241	166	150
Alberta	1	20	.....	21	689	743	1,432	1,273	88·89	509	237	243	203	154	86
Northwest Territories	5	4	.....	9	131	181	312	213	68·26	159	55	50	21	19	8
British Columbia	42	16	2	60	1,371	1,486	2,857	1,984	69·44	1,277	504	455	288	194	139
Yukon	7	2	.....	9	121	120	241	130	53·94	130	32	48	20	7	4
Total	251	77	12	340	7,327	7,691	15,018	10,866	72·35	6,498	2,537	2,311	1,715	1,108	849

INDIAN LAND STATEMENT

SHOWING the Number of Acres of Indian Lands Sold during the year ended the 31st March, 1928, the total amount of purchase money realized and the quantity of land unsold at that date.

ONTARIO

Town or Township	County or District	Number of Acres Sold	Amount of Sale	Number of Acres Unsold	Remarks
			$ cts.		
Albermarle	Bruce			88 00	
Eastnor	"			358 00	
Lindsay	"			489 00	
St. Edmunds	"			206 00	Some of these lands
Bury (Townplot)	"	5 11	72 00	119 63	were resumed by
Oliphant	"			40 00	the Department,
Southampton (Townplot)	"			2 00	the conditions of
Wiarton (Townplot)	"			8 05	sale not having
Islands Saugeen Peninsula	"			160 05	been complied
White Cloud Island	Grey			7 00	with, so that in
Thessalon (Townplot)	Algoma			11 80	certain cases there
Thessalon	"			117 79	appears to have
Havilland	"			718 00	been more land
Apaquash	"			11 23	remaining unsold
Laird	"	454 00	454 00	1,593 00	at the close of the
Vankoughnet	"			426 00	past fiscal year
Kehoe	"			14,337 00	than remained un-
Pennefather	"				sold according to
Campbell	Manitoulin			275 00	the previous year's
Howland	"	4 50	25 00	745 50	report.
Sheguiandah (Townplot)	"	49 00	25 00		
Manitowaning (Townplot)	"			14 33	
Tehkummah	"	292 00	173 40	1,340 00	
Sandfield	"				
Shaftesbury (Townplot)	"	0 50	25 00		
Allan	"			288 00	
West Bay	"			8,244 07	
Billings	"			112 00	
Assiginack	"				
Barrie Island	"			2 00	
Gordon	"	42 00	21 00	32 00	
Gore Bay (Townplot)	"	90 00	12 00		
Carnarvon	"	100 00	100 00	544 00	
Tolsmaville	"	33 13	45 00	968 87	
Mills	"			342 00	
Dawson	"			4,178 00	
Robinson	"	943 00	468 50	1,129 00	
S. Baymouth (Townplot)	"			133 00	
Meldrum (Townplot)	"	0 61	54 00	76 19	
Cayuga (Townplot)	Haldimand			33 36	
Caledonia (Townplot)	"			50 00	
Shannonville (Townplot)	Hastings			0 39	
Thurlow	"			130 00	
Deseronto (Townplot)	"			4 40	
Tyendinaga (Townplot)	"			380 00	
Bedford	Frontenac			193 00	
Islands River St. Lawrence	Prov. Ontario				
Wild Land Reserve	Rainy River	1,468 99	1,617 76	2,344 73	
Long Sault Reserve	"	203 74	1,204 27	198 26	
Little Forks	"			82 43	
Islands Georgian Bay	Prov. Ontario	70 55	1,115 00		
Islands Otonabee Waters	Peterborough				
Beaucage	Nipissing			1,292 42	
Commanda	"			19,568 58	
Pedley	"	320 42	888 05	2,720 38	
		4,077 54	6,299 98	64,114 34	

INDIAN LAND STATEMENT

SHOWING the Number of Acres of Indian Lands Sold during the year ended the 31st March, 1928, the total amount of purchase money realized and the quantity of land unsold at that date.—*Continued.*

QUEBEC

Town or Township	County or District	Number of Acres Sold	Amount of Sale	Number of Acres Unsold	Remarks
			$ cts.		
Ouiatchouan	Lake St. John			3,917 14	
Dundee	Huntingdon			4,057 74	
Maniwaki (Townplot)	Ottawa			39 61	
Temiscamingue	Temiskaming			1,728 59	
Quarante Arpents	Quebec			19 00	
				9,762 08	

NEW BRUNSWICK

Tabusintac	Northumberland			953 00	
Tobique	Victoria			283 00	
				1,236 00	

MANITOBA

The Pas			15,309 99		
			15,309 99		

SASKATCHEWAN

Last Mountain Lake— Res., 80a	Assiniboia			1,207 50	
Lakeview (Townplot)	"		150 00	98 78	
Pasqua	"		240 00	13 85	
Muscowpetung	"	1,033 00	6,400 22	370 00	
Moosomin and Thunderchild	W. Sask	1,974 00	15,988 93	3,106 00	
Crooked Lakes	Humboldt			2,406 00	
Kylemore	"			19 39	
Fishing Lake	"			618 30	
Grizzly Bear and Lean Man	"	159 06	611 50	161 04	
Muscowequan	"	420 08	2,890 40	1,593 84	
Cote	"	320 00	907 50		
Lestock	"				
Keeseekoose	"			571 00	
Key	"				
Kamsack	"			3 11	
Little Bone	"			4,096 28	
		3,906 14	4,409 40	14,265 09	

ALBERTA

Wabamun Reserve	N. Alberta			964 00	
Wabamun (Townplot)	"			456 13	
Samson and Bobtail	"	480 00	4,704 40	823 00	
Louis Bull	"			185 00	
Duffield (Townplot)	"				
Michel	"	160 00	300 00	2,424 00	
Stony Plain	"				
Peigan	S. Alberta			13,694 00	
Sarcee	"			6,650 00	
Blackfoot	"	2,812 50	178,708 63		
		3,452 50	183,713 03	25,196 13	

INDIAN LAND STATEMENT

SHOWING the Number of Acres of Indian Lands Sold during the year ended the 31st March, 1928, the total amount of purchase money realized and the quantity of land unsold at that date.—*Concluded.*

BRITISH COLUMBIA

Town or Township	County or District	Number of Acres Sold	Amount of Sale	Number of Acres Unsold	Remarks
			$ cts.		
Scowlitz Res. No. 1					
Slosh Res. No. 1		10 40	600 00		
Boothroyd Res. 5B		33 67	1,683 00		
		44 07	2,283 00		

GENERAL REMARKS

The land sold during the year amounted to 11,480.35 acres, which realized $113,956.70. The quantity of surrendered land in the hands of the department was approximately 242,958.64 acres. The principal outstanding on account of Indian lands sold amounted to $1,634,306.78, a considerable portion of which has not yet become due.

CIVIL GOVERNMENT, 1927-28

Vote	Grant	Expenditure	Grant not used
	$ cts.	$ cts.	$ cts.
Salaries	156,552 50		
Under Vote 535	4,715 68		
	161,268 18	161,268 18	
Contingencies	18,000 00	17,368 81	631 19
	179,268 18	178,636 99	631 19

APPROPRIATION ACCOUNTS, 1927-28

Vote	Grant	Expenditure	Grant not used	Grant exceeded
	$ cts.	$ cts.	$ cts.	$ cts.
Civil Government	179,268 18	178,636 99	631 19	
Annuities	218,000 00	220,209 00		2,209 00
Nova Scotia	82,840 00	82,728 52	111 48	
New Brunswick	45,489 00	45,485 59	3 41	
Prince Edward Island	6,835 00	6,821 01	13 99	
Ontario and Quebec	314,003 02	314,002 38	0 64	
Manitoba, Saskatchewan, Alberta and Northwest Territories	875,557 00	875,442 65	114 35	
British Columbia	376,170 00	375,870 87	299 13	
Yukon	19,000 00	15,899 28	3,100 72	
General	231,500 00	228,166 18	3,333 82	
Indian Education	2,035,580 00	2,033,375 10	2,204 90	
	4,384,242 20	4,376,637 57	9,813 63	2,209 00

APPROPRIATION ACCOUNTS, 1927-28—*Continued*

Vote	Grant	Expenditure	Grant not used	Grant exceeded
	$ cts.	$ cts.	$ cts.	$ cts.
Miscellaneous Gratuities		600 00		
Special Account	38,192 21	11,667 61	26,524 60	
Miscellaneous Vote 516	1,540 00	1,540 00		
Annuities—				
Treaty 9		804 00		
Robinson Treaty	218,000 00	7,000 00		2,209 00
Manitoba, Saskatchewan, Alberta and Northwest Territories		212,405 00		
Amount over expended			2,209 00	
	218,000 00	220,209 00	2,209 00	2,209 00
Nova Scotia—				
Salaries	6,240 00	6,024 38	215 62	
Relief	25,000 00	29,605 85		4,605 85
Medical	17,200 00	17,554 64		354 64
Miscellaneous	27,400 00	23,624 35	3,775 65	
Agriculture	1,500 00	1,498 20	1 80	
Roads and dyking	5,500 00	4,421 10	1,078 90	
Amount unexpended				111 48
	82,840 00	82,728 52	5,071 97	5,071 97
New Brunswick—				
Salaries	3,939 00	3,641 88	297 12	
Relief	27,000 00	27,988 89		988 89
Medical	11,700 00	10,821 09	878 91	
Miscellaneous	1,400 00	1,522 32		122 32
Agriculture	1,000 00	1,084 16		84 16
Roads	450 00	427 25	22 75	
Amount unexpended				3 41
	45,489 00	45,485 59	1,198 78	1,198 78
Prince Edward Island—				
Salaries	960 00	840 00	120 00	
Relief and seed	2,675 00	2,670 26	4 74	
Medical	2,650 00	2,750 75		90 75
Miscellaneous	250 00	470 00		220 00
Roads	300 00	100 00	200 00	
Amount unexpended				13 99
	6,835 00	6,821 01	324 74	324 74
Ontario and Quebec—				
Relief	139,598 00	152,120 57		12,522 57
General expenses	98,005 00	90,249 46	7,755 54	
Clearing land	1,000 00	130 83	869 17	
Roads	75,400 02	71,501 52	3,898 50	
Amount unexpended				0 64
	314,003 02	314,002 38	12,523 21	12,523 21
Manitoba, Saskatchewan, Alberta and Northwest Territories—				
Implements	27,612 00	23,526 05	4,085 95	
Seed	2,013 00	1,262 15	750 85	
Cattle	2,150 00	1,224 13	925 87	
Destitute	203,450 00	182,111 62	21,338 38	
Medical	288,760 00	297,176 96		8,416 96
Triennial clothing	4,710 00	6,319 72		1,609 72
Surveys	8,000 00	1,990 50	6,009 50	
Sioux	14,145 00	19,465 12		5,320 12
Mills	1,194 00	173 56	1,020 44	
General expenses	318,523 00	337,192 84		18,669 84
Roads	5,000 00	5,000 00		
Unexpended balance				114 35
	875,557 00	875,442 65	34,130 99	34,130 99

APPROPRIATION ACCOUNTS, 1927-28—*Concluded*

Vote	Grant	Expenditure	Grant not used	Grant exceeded
	$ cts.	$ cts.	$ cts.	$ cts.
British Columbia—				
Relief	50,000 00	51,099 50	.....	1,099 50
Seed	9,950 00	9,360 52	589 48	.....
Medical	121,700 00	141,331 02	.....	19,631 02
General expenses	124,670 00	123,012 39	1,657 61	.....
Surveys and irrigation	69,850 00	51,067 44	18,782 56	.....
Amount unexpended	.....	.....	.....	299 13
	376,170 00	375,870 87	21,029 65	21,029 65
Yukon—				
Relief and medical	15,000 00	12,085 25	2,914 75	.....
General expenses	4,000 00	3,814 03	185 97	.....
Unexpended balance	.....	.....	.....	3,100 72
	19,000 00	15,899 28	3,100 72	3,100 72
General—				
Surrender of land	50,000 00	.....	50,000 00	.....
Eskimos	.....	18,813 75	.....	.....
Relief to Indians	100,000 00	90,808 32	.....	9,622 07
Tuberculosis	50,000 00	83,296 55	.....	33,296 55
Printing and stationery	5,000 00	10,629 59	.....	5,629 59
Surveys	6,000 00	2,159 24	3,840 76	.....
Assist to T.F. Acct. 310	3,000 00	3,000 00	.....	.....
Smallpox and other diseases	10,000 00	5,741 52	4,258 48	.....
Registration fees	500 00	224 75	275 25	.....
Legal	7,000 00	13,492 46	.....	6,492 46
Amount unexpended	.....	.....	.....	3,333 82
	231,500 00	228,166 18	58,374 49	58,374 49
Indian Education	2,035,580 00	2,033,375 10	2,204 90	.....
	2,035,580 00	2,033,375 10	2,204 90	.....
Miscellaneous Gratuities	.....	600 00	.....	.....
	.....	600 00	.....	.....
Special Account	38,192 21	11,667 61	26,524 60	.....
	38,192 21	11,667 61	26,524 60	.....
Miscellaneous Vote 516	1,540 00	1,540 00	.....	.....
	1,540 00	1,540 00	.....	.....

INDIAN TRUST FUND

SHOWING transactions in connection with the Fund during the year ended March 31, 1928

Service	Debit	Credit
	$ cts.	$ cts
Balance March 31, 1927		12,860,953 6[illegible]
Collections on land sales, timber and stone dues, rents, fines and fees		942,976 61
Interest for the year ending March 31, 1928		653,946 1[illegible]
Legislative grants to supplement the funds		7,000 00
Outstanding cheques 1925–26		99 76
Credit transfers during the year		519 50
Expenditure during the year	1,262,003 84	
Debit transfers during the year	125 00	
Balance March 31, 1928	13,203,366 84	
	14,465,495 68	14,465,495 68

DOMINION OF CANADA

REPORT

OF THE

DEPARTMENT OF MINES

FOR THE

FISCAL YEAR ENDING MARCH 31, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

No. 2182

To General His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency, in compliance with 6-7 Edward VII, chapter 29, section 18, the report of the work of the Department of Mines, for the fiscal year ending March 31, 1928.

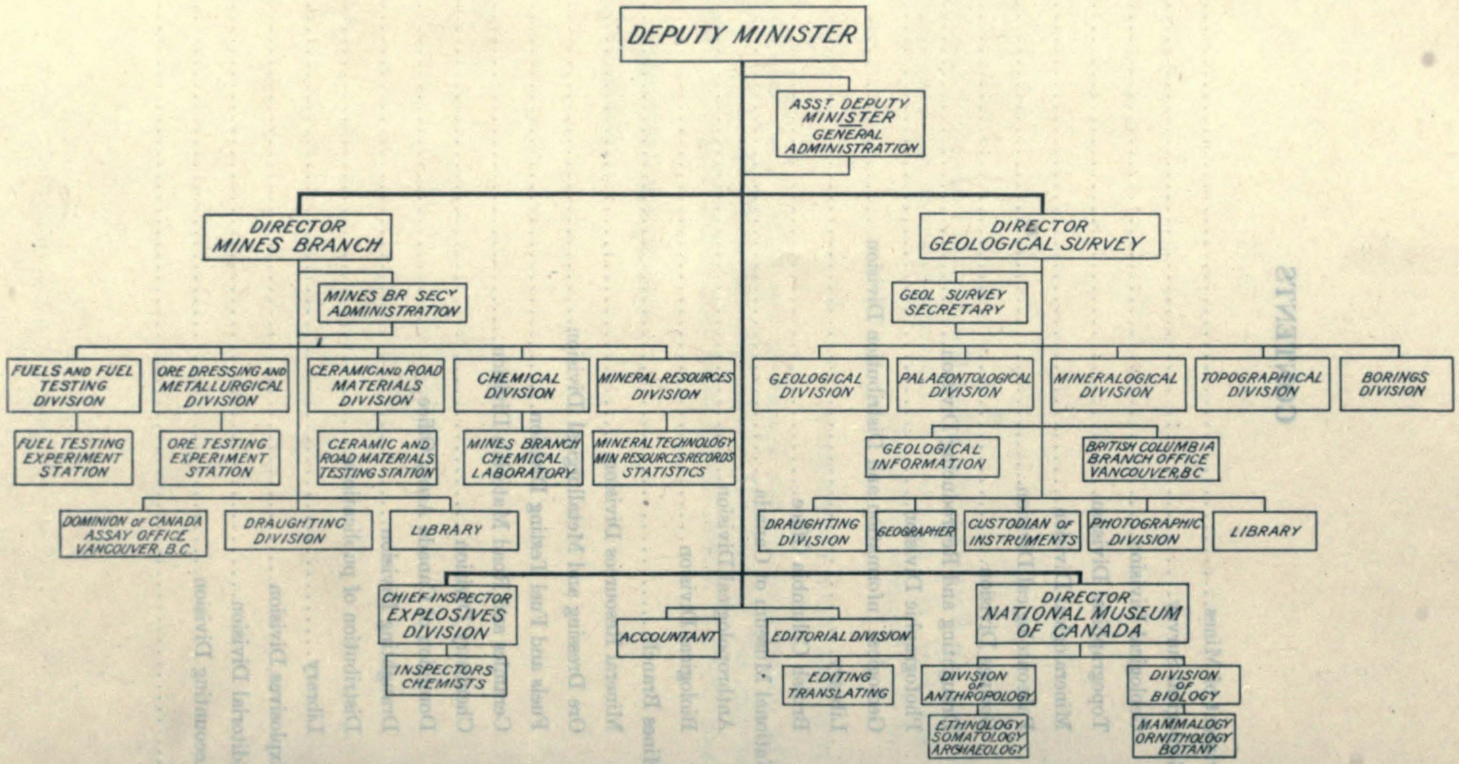
CHARLES STEWART,
Minister of Mines.

CONTENTS

	Page
Department of Mines	1
Geological Survey	11
Geological Division	14
Topographical Division	17
Mineralogical Division	20
Palæontological Division	21
Borings Division	22
Draughting and Reproducing Division	28
Photographic Division	30
Geological Information and Distribution Division	30
Library	30
British Columbia Office	31
National Museum of Canada	32
Anthropological Division	34
Biological Division	36
Mines Branch	40
Mineral Resources Division	41
Ore Dressing and Metallurgical Division	44
Fuels and Fuel Testing Division	46
Ceramics and Road Materials Division	48
Chemistry Division	50
Dominion of Canada Assay Office	51
Draughting Division	52
Distribution of publications	52
Library	52
Explosives Division	54
Editorial Division	56
Accounting Division	60
Index	63

ORGANIZATION CHART

DEPARTMENT OF MINES



REPORT

OF THE

DEPARTMENT OF MINES

FOR THE FISCAL YEAR ENDING MARCH 31, 1928

To the Hon. CHARLES STEWART,
Minister of Mines,
Ottawa.

SIR,—I have the honour to submit, in accordance with the requirements of Parliament, the Annual Report of the Department of Mines for the year ending March 31, 1928.

The period covered by the present report has been one unequalled in activity and expansion in the history of the mining and metallurgical industries of Canada, and has been featured by a constantly increasing demand from all parts of the Dominion for the services of the Department. To meet this demand the investigations conducted both in field and laboratory by the scientific and technical branches of the Department have been extended to areas in every province of Canada. The list of these investigations, and the range and variety of the problems embraced, are in themselves sufficient to indicate the importance of the position that mining has already achieved in the industrial life of the nation, and the influence that it is likely to exercise on the course of our future economic development.

Statements of the functions and details of the operations of the several branches and divisions of the Department during the year, prepared by the heads of each branch or division, are to be found below. An examination of these statements will reveal that although much is being accomplished to further the economic development of our mineral resources, much still remains to be done, and that increased facilities for economic research along these lines, and consequently greater expenditure by both Dominion and provincial governments are very likely to be in the order of things for years to come. A growing recognition of the value of scientific and technical research in the solution of problems related to the utilization of our natural resources has manifested itself particularly in the mining and metallurgical industries. Metallurgical research has already resulted in a notable contribution to the wealth of the Dominion by rendering profitable many previously unprofitable deposits and by extending the lives of a number of the older mining camps. Equally valuable, if not quite such spectacular, progress is being made in other directions, notably in respect to the utilization of our low-grade fuel resources. Geological science is rendering invaluable assistance in locating and determining the oil-bearing formations of the west, and in the search for and exploitation of the metalliferous and other mineral deposits with which the Dominion is so richly endowed.

In the very diversified field of activity in which it operates, the Department of Mines is chiefly concerned with the various scientific and technical phases of

mining, milling, and metallurgical operations, and with delimiting, mapping, and directing attention to the mineralized areas of Canada, in assisting the mine operator and metallurgist in solving the problems continually arising in the business of extracting, milling, and smelting ores, and, through technological research, in the study of methods by means of which the product of the mine may be more efficiently utilized and the market for Canadian mineral products extended. This work, in its relation to national development, has a value far beyond that represented by the purely material results immediately secured. In the history of modern civilization mining has proved to be one of the greatest pioneering and colonizing influences, and the primitive mining camp of today is, in fact and often, the thriving and many-sided community of tomorrow.

During the year the Geological Survey had fifty field parties engaged in geological and topographical mapping and related work, operating in widely separated parts of the Dominion. This number was supplemented by various field investigations undertaken by the Mines Branch and the National Museum of Canada. Field work in geology, topography, mineral resources, palæontology, ethnology, and biology was continued from last year and new investigations were commenced; laboratory investigations embraced a wide range of subjects in the fields of mineralogy and petrography, ore dressing and metallurgy, fuel testing, ceramics, and road materials. To provide much-needed accommodation for the increasing work in fuel testing the construction of a new Fuel Research Laboratory at Ottawa was commenced, and it is expected that the new building will be ready before the end of the next fiscal year. Plans have also been made for a large-scale experiment in the manufacture of peat fuel and a very complete peat manufacturing plant, planned in accordance with the recommendations of the former Joint Peat Committee, has been built during the past year at Alfred, Ontario. This will be operated during the year on a basis approximating as closely as possible commercial conditions.

The Department has maintained during the year its general policy of co-operation with other departments of the Dominion and of provincial governments, and with the development branches of the railway companies, banks, chambers of commerce, and other Canadian organizations interested in the development of our natural resources. The general type of investigation undertaken by the Department differs distinctly from those conducted by other bodies, and the danger of overlapping is almost entirely eliminated. Where similar work is carried on—as is the case in some of the universities, provincial governments, and the National Research Council—every effort is made to co-ordinate the work of the Department with that of these various bodies. Close co-operation is also maintained with the Imperial Institute (London), the British Department of Scientific Research, the United States Department of Commerce at Washington, and with certain technical societies in the United States.

An outstanding event of the year was the meeting in Canada of the Second (Triennial) Empire Mining and Metallurgical Congress, which opened in Montreal on August 22, and closed in Quebec on September 28, following an extensive tour of the Dominion during which the principal mining and metallurgical centres were visited. The Congress was convened by the Canadian Institute of Mining and Metallurgy and was representative of every important phase of the mining and metallurgical industries in all parts of the Empire. Included in the total attendance, which exceeded twelve hundred, were delegates from mining and kindred associations established throughout the Empire and visitors from many foreign countries. The papers presented at the technical sessions of the Congress embraced a wide variety of topics related to recent progress, the present status and future prospects of the mining and metallurgical industries in almost every section of the Empire where these

industries are carried on. Specially prepared handbooks descriptive of Canada's mining and metallurgical industries were issued on this occasion by the Department, by several of the provincial governments, and by numerous private organizations. Every opportunity was given the visitors to secure an accurate idea of the extent and variety of our mineral resources and of their industrial possibilities, and the Congress was particularly impressed by the progress made in mining and metallurgy throughout the whole of the Dominion in the last few decades. The attendant publicity both at home and abroad, the technical discussions during the Congress, and the personal contacts made between outstanding mining men in different parts of the Empire, are factors that may mean much to the development of mining in Canada, and although it is impossible to estimate in terms of dollars the benefits which Canada will derive from this meeting on her own soil, it is not difficult to foresee that such benefits, both direct and indirect, will be of considerable importance.

The Deputy Minister, in addition to his administrative duties, devoted a considerable part of his time to other work devolving upon him as chairman or member of the following official bodies: Council of the Northwest Territories; Dominion Fuel Board; Canadian Committee of the World Power Conference, Advisory Committee on Mining Regulations, National Research Council; Niagara Board, Advisory Committee on Minerals of the Imperial Institute. Meetings of each of these bodies were held throughout the year. The work of the Lignite Utilization Board, of which the Deputy Minister has been a member since 1924, has now been brought to a close and a satisfactory disposition has been made of the leases and other rights, and of the equipment of the board.

In the autumn of 1927 the Deputy Minister accompanied the Minister of Mines on a visit to several European centres in which experimental work in the processing of fuels is in progress. The itinerary for this tour was planned in co-operation with the British Fuel Research Board and with official organizations in Germany, which permitted of a selection being made of the more advanced operations in both of these countries. Four low temperature retorts were inspected in Germany, and eight British plants, situated in South Wales, London, the Midlands, and in Scotland, were also examined. As a result of these investigations valuable information was gained which may have a bearing on the application of processing treatment to certain types of Canadian fuels should any of these developments prove applicable to Canadian conditions. Several processes designed to accomplish the liquefaction of coal or the conversion of coal into oil were examined. A small unit of the Bergius process installed in the British Fuel Research Station at Greenwich was inspected, and experiments in which the Fischer process is being essayed were witnessed at the Kaiser Wilhelm Institute of Coal Research at Mulheim on the Ruhr. Information was also secured in respect to a third process with which experiments are being made at Leuna in Germany. The possibilities involved in these different developments are of particular interest to Canadians because of our large reserves of low-grade coals. Although the liquefaction of coal is still in a comparatively early stage of advancement, important progress has already been made and it is highly desirable that further developments along these lines be carefully watched. While in Europe, the Deputy Minister participated in a meeting of the International Executive Council of the World Power Conference held at Cernobbio, near Como, Italy, September 5 to 10, and meetings in London of the Advisory Council on Minerals of the Imperial Institute.

The official mining newsletter series prepared by the Department and distributed from the High Commissioner's Office in London, has been maintained.

By means of this series, which was inaugurated in 1923, a rational and informed interest in Canadian mineral resources and mining operations is constantly sustained. This fortnightly service now reaches some four hundred selected newspapers, mining, banking, and investment houses in the United Kingdom and on the Continent. The titles of the twenty-eight articles dispatched during the year will be found following the list of papers and addresses appearing on pages 7 to 9.

As in preceding years, the results of all major investigations conducted by the Department in the field and in its laboratories have been published in the form of summary reports, special bulletins, maps, and memoirs. A great deal of information of scientific, technical, and current interest connected with the work of the Department is also disseminated through the public and technical press, and by means of addresses. In this phase of its activities the Department has continued to receive the valuable co-operation of the Natural Resources Intelligence Branch of the Interior Department. Requests received from a number of newspapers which proposed to issue special editions in honour of the Diamond Jubilee of Confederation led to the preparation by the Department of a series of thirteen special articles for release on this occasion. These articles were distributed to newspapers in many different parts of the Dominion and in the United Kingdom and included, in addition to reviews of progress made in the Canadian mining and metallurgical industries since Confederation, a number of articles prepared by members of the staff dealing with various other economic and cultural aspects of past and present phases of life in Canada. The annual series of educational lectures given during the winter months in the Lecture Hall of the Victoria Memorial Museum was again favourably received, and will be continued as heretofore.

Preliminary figures of mineral production recently published by the Dominion Bureau of Statistics show a new high record reached during the past year, when the value of the output rose to $247,356,695, a gain of nearly $7,000,000 over the record output in 1926, and of almost 200 per cent in the twenty-year period since 1907. Not only has 1927 been a record year for production; it has also witnessed the broadest and most important advance in development yet recorded in the history of Canadian mining, and has seen the field of operations extended and a more solid foundation laid for a still greater and more remarkable advance in the future. It can safely be said that never before has mining in the Dominion attracted and so consistently held the amount of interest that it does at the present time, and never has the effort to make the mineral-bearing regions of the Dominion yield up their wealth been so well organized and intensive, or so widespread.

An important feature of this record output, and one that has great industrial significance, is the diversity of fields over which it is spread. New output records have been established in a variety of metals and non-metallic minerals. Material advances have been made in the production of gold, copper, lead, and zinc, and in that of coal, cement, lime, and gypsum. An increase is also shown in the values of natural gas and petroleum, and an advance over production in 1926 is recorded for some twenty mineral products of varying industrial importance. Of the total production value recorded for 1927 over 99 per cent was contributed by nineteen different mineral products, each of which had an output of $1,000,000 or more in value. On the whole a very healthy trend is visible to which greater emphasis is lent by the fact that, notwithstanding general declines during the past few years in the prices of mineral products, as revealed by the index numbers of the Bureau of Statistics, the total value of the annual mineral production steadily continues to increase.

The mining and metallurgical industries are yearly gaining in importance in the industrial life of the provinces. It has recently been said that mining may soon rank as the second of Canada's primary industries, and a study of the fields over which it is so rapidly expanding makes the realization of this prophecy appear not altogether impossible. Mining operations are now a matter of vital concern to three Canadian provinces, of prime importance to two others, and are becoming of increasing importance to the remaining three large provinces. In order of production in 1927 Ontario came first, British Columbia second, Nova Scotia and Alberta almost equal, Quebec fifth with a rapidly increasing production, and Manitoba, New Brunswick, Yukon, and Saskatchewan following in the order given. Developments in Quebec and more recently in western Manitoba and in Saskatchewan have thrown a new light on the mineral resources of these provinces, and the success of the pioneers in these fields has provided the incentive to greater activity and the more intensive examination of previously prospected areas. Vast areas hitherto entirely unexplored or which had been only hurriedly prospected have been made more readily accessible by airplane. The search for minerals is today contributing more than any other agency to the exploration of unmapped territory, and the map of the Dominion is being unrolled northward with remarkable rapidity. Enough is now known of the resources of the north to enable one to foresee the establishment, within a comparatively short space of time, of important mining and metallurgical centres throbbing with life and movement, and contributing materially to the greater economic development of the Dominion.

Most of the enterprises now operating in the Canadian mining field are in the hands of reputable concerns interested in the honest development of their properties. The stock exchange frenzy of 1926 and 1927 and the ease with which funds could then be secured proved an irresistible inducement to operators of many promotions of the mushroom type, incorporated principally with the object of mining the public. This very undesirable element has since, fortunately, to a large extent disappeared, partly because of the greater caution now manifested by the investing public and partly because of repressive measures adopted by the governments concerned and by the banks. It cannot be too clearly understood that mining in the exploratory and pre-development stage is, in very many cases, risky, and all that the investor can possibly hope for is the honest expenditure of the funds of the company by an honest and competent management. The Canadian mining industries offer, on the other hand, a wide variety of opportunities of proven and undoubted value which, from the investment point of view, do not carry the risks inevitably associated with issues of the more speculative classes.

The Department wishes to express its appreciation of the recent tribute made to the memory of the late George Mercer Dawson, Director of the Geological Survey from 1895 to 1901, by Mr. Fenley Hunter, of New York city. Mr. Hunter's tribute is in the form of a memorial tablet which was erected in September, 1927, on the right bank of Liard river, Yukon territory, on the site of a boundary post placed there in 1887 by Dr. Dawson during his explorations in those regions. The erection of this memorial to a great Canadian geologist and explorer by a citizen of the United States of America is a fine tribute not only to Canadian science, but also to the interest and appreciation of the people of the United States. A more detailed description and a photograph of the monument have been included in the report of the Director of the Geological Survey in this volume.

Dominion Fuel Board

The Dominion Fuel Board, during the year, was engaged not only with the investigations previously initiated but also with inquiries in connexion with the better utilization of fuels, and the new uses to which coal is being put.

In co-operation with the Mines Branch, Department of Mines, a fuel power survey was planned with a view to learning how the fuels of the Dominion are being utilized in industry and promoting more economic methods in the use of fuels. The board is keeping in touch with experiments and methods for burning pulverized coal and arrangements have been made for the Mines Branch to investigate the present status of the project. If this method is found to be practicable, the use of certain Canadian coals, the markets for which are at present restricted owing to their high content of low fusibility ash, may be considerably extended.

The first of a series of pamphlets on house insulation and allied subjects was published in English and French by the board during the year. The object of this pamphlet is to direct public attention to the large wastage of heat resulting from improper house construction and to suggest methods whereby this loss may be overcome. Public reception of the 25,000 copies issued was such as to necessitate the printing of a second similar edition. Other pamphlets of the series are in course of preparation.

Information obtained by the board from an earlier investigation of the use of wood as an auxiliary fuel in Ontario was passed to the Forestry Branch, Department of the Interior. A synopsis of the investigation will be published in the general report of the Fuel Board now in course of preparation. The annual survey for the purpose of ascertaining the extent to which imported anthracite is being displaced in Ontario and Quebec was in the year under review conducted for the Fuel Board by the Mineral Resources Division of the Department of Mines. Data obtained in this way provide a broad knowledge of our domestic fuel situation. The report on the survey indicates a notable increase in the use of the so-called " substitute fuels." The board continued its program of distributing throughout Ontario and Quebec, printed cards and pamphlets showing proper methods of burning coke and other fuels displacing imported anthracite. At the board's direction a revised pamphlet on the use of these substitute fuels, printed in both English and French, was prepared and distributed by the Mines Branch, Department of Mines.

Administration of the Domestic Fuel Act, passed during the Session of Parliament of 1927, was assigned to the Fuel Board. The board dealt with an application for the benefits of the Act during the period under review, and submitted the necessary recommendations to the Minister. The application was accepted.

At the conference of the Provincial Premiers and Federal Cabinet held at Ottawa in November, the deliberations included the development of a Canadian fuel supply. For use at this convention special briefs dealing with the fuel situation were prepared by the board. The board also prepared and submitted information for ministerial use in connexion with the framing of policies which the Government adopted for test movements to extend the markets for the coals of both eastern and western Canada.

Articles for press and journalistic publicity and public addresses on the fuel situation were included in the year's activities. Information relative to fuel matters was supplied by the board to different branches of the Government service, and many requests from the public for such information were dealt with.

The Natural Resources Intelligence Service, the Mines Branch, Geological Survey, the Dominion Water Power and Reclamation Service, and the Dominion Bureau of Statistics freely co-operated with the board.

The board proposes to issue soon a general report covering its activities and progress since the Interim Report was published in 1923.

Changes in personnel and staff during the year included the resignation of Mr. C. P. Hotchkiss as a member and executive secretary of the board. Mr. F. G. Neate was appointed secretary in the place of Mr. Hotchkiss. Mr. M. D. McCloskey was transferred from the Department of the Interior to the staff of the Fuel Board.

Your obedient servant,

CHARLES CAMSELL,
Deputy Minister.

OTTAWA, November 7, 1928.

List of Papers and Addresses

(NOTE.—Lists of the papers prepared and addresses delivered during the year by members of the staff of the Divisions of Anthropology, Biology, and Mineralogy are to be found in the Annual Report of the Director, National Museum of Canada)

General

The Status of the Canadian Mining Industry, by Hon. Charles Stewart. Empire Mining and Metallurgical Congress, August 22, 1927.

Canada's Mineral Wealth, by Hon. Charles Stewart. Canadian Progress, 1927.

Our Mining Industry, by Hon. Charles Stewart. Canadian Mining Manual, 1927.

Dominant Developments in Canada, by Charles Camsell. Financial Times (Montreal), August 26, 1927.

The Dominion's Minerals, by Charles Camsell. Financial Times (London), November 21, 1927.

Range of Canada's Mineral Wealth, by Charles Camsell. "Canada" Mining and Financial Supplement, July 30, 1927.

The New Position of Canadian Mining, by Charles Camsell. Stock Exchange Gazette, London.

Canada's Mining and Metallurgical Industries, by Charles Camsell. Industrial Canada, January, 1928.

Canada's Mineral Resources and Development, by Charles Camsell. Special Canada Number, Empire Mail (London), March, 1928.

Mining, by Charles Camsell. Gyro Club, Ottawa, April 13, 1927.

The Mining Industry, 1927, by Wyatt Malcolm. Annual Financial Review number of the Gazette, Montreal.

The Mining Industry, 1927, by Wyatt Malcolm. Natural Resources, Canada, vol. 7, No. 1, p. 4, January, 1928.

The Second Empire Mining and Metallurgical Congress, by Charles Camsell. Canadian Institute of Mining and Metallurgy, March 8, 1928.

The Forthcoming Meeting of the Second (Triennial) Empire Mining and Metallurgical Congress in Canada, by J. McLeish. Address to Rotary Club, Ottawa, August, 1927.

The Geological Survey of Canada, by Wyatt Malcolm. The Canada Year Book, 1926, pp. 34-36 (1927).

The Work of the Mines Branch, Department of Mines, by John McLeish. Address to the Lion's Club, Ottawa, May, 1927.

Field Work and Investigations To Be Undertaken by the Mines Branch During the Season of 1927, by John McLeish. Special List of Journals and Officials.

Activities of the Dominion Fuel Board, by F. G. Neate. Canadian Review, 1927.

Geology, Mining, Mineralogy, and Mineral Resources

Geology of Canada, by Wyatt Malcolm. The Canada Year Book, 1926, pp. 16-27 (1927).

Geology of Canada, by Wyatt Malcolm. Empire Congress number of the Globe, Toronto.

Economic Geology of Canada, 1926, by Wyatt Malcolm. The Canada Year Book, 1926, pp. 28-34 (1927).

Outline of Carboniferous Stratigraphy and Geologic History of the Maritime Provinces of Canada, by W. A. Bell. Transactions, Royal Society of Canada, section IV, 1927.

Stratigraphy of the Northern Subprovince of the Lake Superior Region, by T. L. Tanton. Geological Society of America Bulletin, vol. 38, pp. 731-748.

The Eastern Contact Zone of the Coast Range Batholith on Stikine River, by F. A. Kerr. Canadian Mining and Metallurgical Bulletin No. 189, pp. 179-183, January, 1928.

Review of "Our Mobile Earth," by R. A. Daly; F. J. Alcock. Canadian Field Naturalist, May, 1927.

Zoning of Mineral Deposits, by George Hanson. Royal Society of Canada, Proceedings and Transactions, vol. 21.

Emulsions of Silicates, by T. L. Tanton. American Journal Science, vol. 15, pp. 66-68.

Chemistry in Mining, by C. S. Parsons. Toronto Branch, Canadian Chemical Association.

Economic Minerals, by H. F. Fréchette. Broadway Avenue Public School, Westboro.

An X-Ray Study of the Garnet Group, by C. H. Stockwell. American Mineralogist, vol. 12, No. 9.

Diamond Jubilee Celebration in the Gaspe Mineral Area, by F. J. Alcock. Canadian Mining Journal, July 22, 1927, p. 580.

Recent Developments in Gaspe Peninsula, by F. J. Alcock. Canadian Mining and Metallurgical Bulletin, pp. 367-385, March, 1928.

Industries of the Niagara Peninsula; Power and Transportation; Electro-Chemical Industries; Metallurgical Industries; Chemical Industries; by A. W. G. Wilson. Second (Triennial) Empire Mining Congress.

Mining in Nova Scotia, by A. H. A. Robinson. Halifax Herald.

Abrasives, by V. L. Eardley-Wilmot. Mineral Industry for 1926.

Lead and Zinc in Canada, by T. W. Bingay and F. J. Alcock. Canadian Mining and Metallurgical Bulletin, pp. 920-943, August, 1927.

Oil and Gas Developments in Canada, by G. S. Hume. Journal of the Institution of Petroleum Technologists, vol. 13, No. 63, August, 1927.

Oil and Gas in the Maritime Provinces, by W. A. Bell. Second (Triennial) Empire Mining and Metallurgical Congress, Alberta.

The Recent Zinc Discoveries near Sudbury, Ontario, by A. Buisson. Second (Triennial) Empire Mining Congress.

Fuels and Fuel Testing

Low Temperature Carbonization and Coal Liquefaction in Europe, by Hon. Charles Stewart. Canadian Mining Journal, December 9, 1927.

Recent Developments in Europe in the Treatment of Coal and Their Application to Canada, by Charles Camsell. Canadian Club of Ottawa, February 18, 1928.

Low Temperature Carbonization and Liquefaction of Coal, by Charles Camsell. Canadian Mining Institute, Ottawa Branch, November, 1927.

Research and Investigations of the Division of Fuels and Fuel Testing, by senior members of staff of the Division of Fuels and Fuel Testing. Canadian Chemistry and Metallurgy, August, 1927.

Gasoline by Pressure Cracking of Canadian Shale Oil and Bitumen, by R. E. Gilmore, Canadian Chemistry and Metallurgy, November, 1927.

Fuel Markets and Their Development, by F. G. Neate, Financial Times, London, England, December, 1927.

Extended Use of Alternative Fuels, by F. G. Neate, January, 1928.

Canada's Fuel Problem, by Charles Camsell. Address before Ottawa Canadian Club, February, 1928.

Development of Welsh Coal Market in St. Lawrence District, by F. G. Neate. Financial Times, London, England, March, 1928.

Improvement in Domestic Fuel Situation, by M. D. McCloskey. Toronto Saturday Night, April, 1927.

Subsidy for Coke Plants, by M. D. McCloskey. Natural Resources Canada, April, 1927.

Fuel Problem in Ontario, by F. G. Neate. Canadian Retail Coal Dealers' Association, Toronto, May, 1927.

Ore Dressing and Metallurgy

The Ore Dressing and Metallurgical Laboratories, by W. B. Timm. Toronto Branch, Canadian Institute of Mining and Metallurgy.

Improvements and Innovations in Canadian Flotation Practice, by W. B. Timm. Annual Meeting of British Columbia Branch, Canadian Institute of Mining and Metallurgy.

Custom Concentrators, by C. S. Parsons and A. K. Anderson. Annual Meeting, C.I.M.M., Quebec, Que.

Flotation Practice (2 papers), by C. S. Parsons. Mining Students, Queen's University, Kingston.

The Flotation Process, by C. S. Parsons. Engineering Society, Queen's University, Kingston.

The Flotation Process, by C. S. Parsons. Ottawa Branch, Society of Chemical Industry.

The Concentration of Ores of Western Quebec, by G. S. Godard. Annual Meeting, C.I.M.M., Quebec.

Ceramics and Road Materials

Address to Ceramic Students of Toronto University, by H. F. Fréchette. March, 1928.

Clay Handling and Delivery Costs, by J. F. McMahon. American Ceramic Society, February, 1928.

Enamelling on Metal, by J. F. McMahon. Victoria Memorial Museum.

The Enamelled Saucepan, by J. F. McMahon. Victoria Memorial Museum.

Roads and Road Materials, by H. F. Fréchette. Special List of Journals.

Physiography and Topography

A New Method of Determining the Rate of Recession of Niagara Falls, by W. H. Boyd, Transactions Royal Society, Canada.

Co-ordination of Topographical and Geological Mapping in Relation to Mining Development, by K. G. Chipman and W. F. James. Canadian Institute of Mining and Metallurgy, Annual Meeting, Quebec, March, 1928.

Canada's Physical Features Promise Rich Future, by D. A. Nichols. Confederation Issue, Ottawa Journal, June, 1927. Reprinted in several papers.

Palæontology

The Ancient Life of Canada, by E. M. Kindle. Mail and Empire and other Canadian papers.

The Role of Thermal Stratification in Lacustrine Sedimentation, by E. M. Kindle. Trans. Royal Society of Canada, vol. 21, ser. 3, sec. 4, pp. 1-35 (1927).

The Romance of Fossil Hunting, by E. M. Kindle (Review). Journal of Geology, vol. 35, pp. 95-96 (1927).

Some Canadian Triassic Faunas, by F. H. McLearn. Trans. Royal Society of Canada, 3rd ser., vol. 21, sec. 4, pp. 61-73, Pl. 1, Fig. 7 (1927).

Horned Dinosaur Group in National Museum of Canada, by C. M. Sternberg. Canadian Field Naturalist, April, 1927.

Homologies of Certain Bones of the Ceratopsian Skull, by C. M. Sternberg. Royal Society of Canada, 3rd ser., vol. XXI, sec. IV, 1927.

Hunting Dinosaurs in the Bad Lands, by C. M. Sternberg. Y.M.C.A., Ottawa, October 19, 1927.

Dinosaurs, by C. M. Sternberg. Trinity Church; Ottawa Boys' Club, March 17, 1928.

Hunting Dinosaurs in Alberta, by C. M. Sternberg. Kiwanis Boys' Club, Ottawa, February 3, 1928.

The Age of Mammals, by C. M. Sternberg. National Museum of Canada Lecture Course, January 14 and 18, 1928.

Evolution of the Horse, by C. M. Sternberg. Veterinarian Group, Professional Institute, Ottawa, March 7, 1928.

Mining Newsletter Series

(Distributed from the Office of the High Commissioner for Canada in London)

Great Possibilities of the Stikine River Area, by F. A. Kerr.

Copper in Canada, by A. H. A. Robinson.

Progress of Exploration in Beardmore Area, by T. L. Tanton.

Recent Zinc Discoveries near Sudbury, by A. Buisson.

Ore Deposits near Portland Canal, B.C., by G. Hanson.

Alberta Bituminous Sand for Paving Purposes, by S. C. Ells.

Turner Valley Oil Field, Alberta, by G. S. Hume.

Field Work of the Geological Survey, by Wyatt Malcolm.

Nova Scotia Salt for Use in the Fisheries, by L. H. Cole.

The Empire Mining Congress, by C. Camsell.

The Acid Industry in Canada, by D. M. Stewart.

Lead and Zinc in Sudbury District, by W. H. Collins.

Horne Smelter Soon to Commence Operations, by H. C. Cooke.

Further Development in Rouyn Area, by H. C. Cooke.

Alkali Industry in Canada, by D. M. Stewart.

With the Eastern Tour of the Empire Mining Congress, by Wyatt Malcolm.

Kirkland Lake Gold Area, by A. Buisson.

Mining Developments in Manitoba, 1927, by J. F. Wright.

Lead and Zinc in Canada, by A. H. A. Robinson.

Mining Developments in British Columbia, 1927, by V. Dolmage.

The Mining Outlook in British Columbia, by V. Dolmage.

The Zinc-copper Deposits at Chelmsford, by A. Buisson.

Mining Developments in Western Quebec during 1927, by W. F. James.

Canadian Talc and Soapstone Industry Shows Progress, by H. S. Spence.

Mining Development in Gaspe Peninsula, by F. J. Alcock.

Progress of the Porcupine Gold Area, by A. Buisson.

The Chibougamau District of Quebec, by J. B. Mawdsley.

Antimony in Canada, by A. Buisson.

GEOLOGICAL SURVEY

W. H. Collins, Director

CHANGES IN STAFF

In the Geological Division, W. S. Dyer, assistant geologist, resigned on June 8, 1927, to take a position as geologist in the Ontario Department of Mines. C. H. Stockwell was appointed assistant geologist on June 4, 1927, and H. C. Gunning on January 1, 1928.

The Draughting Division was strengthened by the addition of two apprentice draughtsmen, G. S. Daughtry, on September 20, 1927, and W. C. Güssow, on September 21. To meet a need both in the Geological Survey and in the National Museum for relief models of geological, topographical, and other features, R. E. Ouimet, of the Topographical Surveys Branch, Department of the Interior, was appointed relief map maker on June 27, 1927. A. V. Waite was appointed process worker in the Photographic Division, on April 15, 1927, to replace L. Y. Clarke, who resigned in 1926.

Among the positions of a clerical nature, Miss V. I. Reid, stenographer in the Borings Division, resigned on October 16, 1927, and was succeeded on January 1, 1928, by Miss A. H. Campbell. P. J. Moran was appointed, on August 1, 1927, as principal clerk, to take over the duties of the late Alexander Young, deceased August 2, 1926.

On March 3, 1928, John James McGee, junior clerk, died. Mr. McGee had been in the Geological Survey for twenty-four years, and was held in esteem and affection by his associates.

PROGRESS OF WORK

A short explanation was made in last year's report of the need for classifying and making more accessible to users of Survey publications the information which is scattered through the great number of reports and maps that have been issued since 1842. This work of systematizing maps and reports is making satisfactory progress, though owing to the slowness of preparing and publishing such matter a few years must elapse before any marked results can be apparent.

The general geological map of Canada, on a scale of 1 inch to 100 miles, is now in its third edition, and, complementary to it on the same scale, is an index map to the mineral occurrences. Of thirty-four regional geological maps on a scale of 1 inch to 8 miles which are planned, four are published (Nos. 39A, 155A, 190A, and 204A), three are in course of publication, and work will shortly commence upon three others. A large number of 1 inch to 1 mile topographical and geological sheets, each covering 15 minutes of latitude and 30 minutes of longitude, are published or in various stages of preparation. This system, inaugurated about 1909 by R. W. Brock, Director at that time, is already well established, being also adopted by the topographical survey organizations in the Department of the Interior and the Department of National Defence.

The series of Economic Geology reports, which is designed to assemble into compact and convenient form the mass of information about mineral occurrences that is scattered through the reports of the Survey, the publications of the provincial Departments of Mines, and various periodicals, is also making good progress. Four reports—on talc, iron ores, arsenic, and a general report on the geology and economic minerals of Canada—are published; four others—

on oil and gas, lead and zinc, the rare-element minerals, and a handbook for prospectors—are in course of publication; and work has been commenced on four more.

These publications are largely supplementary to the usual activities of the Survey, the extent of which is increasing yearly.

NEEDS

Some growth in the Survey has been necessary to keep up with the growth of the mineral industry in Canada, the northward trend of railway communication, and prospecting, and the consequent demand for geographical and geological information. In a distorted fashion this growth is reflected by the table given below—distorted, because the diminishing purchasing power of money cannot be taken into account, and also because the expenditures mentioned include those for the National Museum as well as the Geological Survey, the former being a rapidly growing institution requiring more and more financial support. Neither does column one express the fact that the effective scientific staff of both Survey and Museum is augumented every summer by teachers and students from almost every Canadian university to carry on field work. The cost of their services is included in column two, which covers all costs of both institutions with the exception of salaries of permanent employees (column one) and the maintenance, heating, and lighting of the buildings, which is borne by the Department of Public Works. Even about 10 per cent of the salaries of permanent employees is covered by column two.

The salary pay-roll has kept pace fairly closely with the growth of the mineral industry. Expenditures for field work and all related operation costs (column two) has not advanced as rapidly and since 1920 there has been a decrease, in spite of the fact that since 1920 the number of field parties has increased about one-third and a much larger number of scientists from universities have been employed temporarily. In large measure this decrease has been accomplished by strict economy. However, economy has its limitations, and in the present case they seem to have been nearly reached. If more work is required from the Geological Survey more funds for column two will be needed.

But further support in this direction is not requested, except in very small amount, for there is another direction in which the need appears to be greater —an enlargement of the Victoria Memorial Museum, the home of the Geological Survey and the National Museum, in order to provide more laboratory and office room for scientific and technical work and more storage and exhibition space for museum purposes. This need is explained at some length in an article entitled "The National Museum of Canada" in the Annual Report of the National Museum for 1926, and is also referred to in the section of the present annual report of the Department which deals with the museum.

IN MEMORY OF

GEORGE MERCER DAWSON

GEOLOGIST SCIENTIST EXPLORER

BORN AUG. 1. 1849
DIED MARCH 2. 1901

THIS MONUMENT MARKS THE SITE OF ORIGINAL WOODEN POST ERECTED BY DAWSON IN 1887 AS A REFERENCE MARK FOR THE B.C.—YUKON BOUNDRY LATITUDE 60° 1' 6"

THIS MONUMENT ERECTED 1927 BY FENLEY HUNTER TO REPLACE ORIGINAL POST REMOVED BY HIM IN 1923

Year	Salaries (about 90% of permanent employees, Geological Survey and National Museum)	All other costs, Geological Survey and National Museum	Total cost, Geological Survey and National Museum	Value of mineral production in Canada (for calendar years 1900–1927)
	$ cts.	$ cts.	$ cts.	$
1927– 8	331,649 40	303,605 18	639,254 58	247,356,695
1926– 7	274,605 59	312,448 88	587,154 47	240,437,123
1925– 6	274,360 60	316,533 84	590,894 44	226,583,333
1924– 5	280,593 19	302,088 44	582,681 63	209,583,000
1923– 4	271,938 20	292,596 77	564,534 97	214,079,331
1922– 3	259,509 40	289,155 89	548,665 29	184,297,242
1921– 2	241,495 38	332,756 39	574,251 77	171,923,342
1920– 1	228,507 19	336,245 90	564,753 09	227,859,665
1919–20	213,192 43	293,096 60	506,289 03	176,686,390
1918–19	202,008 05	206,292 33	408,300 38	211,301,897
1917–18	196,043 30	223,474 81	419,518 11	189,646,821
1916–17	195,448 30	224,703 29	420,151 59	177,210,534
1915–16	193,775 77	314,535 60	510,311 37	137,109,171
1914–15	179,490 93	302,792 29	482,283 22	128,863,075
1913–14	155,381 99	285,388 99	440,770 98	145,634,812
1910–11	103,502 94	167,791 25	271,294 19	106,823,623
1905– 6	62,036 78	145,109 05	207,145 83	69,078,999
1900–01	51,436 14	71,479 30	122,915 44	64,420,877

MEMORIAL TO G. M. DAWSON

The diversified services rendered by the Geological Survey are especially well exemplified by the work of Dr. George M. Dawson, geologist and former Director, of whom the Victoria *Colonist* once said editorially: "In one sense he is the discoverer of Canada, for the Geological Survey, of which he has been the chief, has done more than all other agencies combined to make the potentialities of the Dominion known to the world." More recently another testimonial has been paid to Dawson by Mr. Fenley Hunter, of New York city.

Mr. Hunter has travelled extensively in northern British Columbia, Yukon, and the North West Territories, where the surveys made by Dawson and other early explorers are still, to a large extent, the best geographical information available. In the course of one of his trips he found a wooden post on the bank of Liard river, that had been placed there by Dawson in 1887, to indicate the position of the boundary between British Columbia and Yukon, which at that time was defined but not actually surveyed. The post was badly decayed, so Mr. Hunter had made and erected in its place in 1927 a metal monument in appreciation of the accuracy of Dawson's surveys and the far reaching extent of his explorations. These are all the more remarkable when it is remembered that, forty years ago, the main line of the Canadian Pacific railway was the only organized means of travel across western Canada, and also that most of Dawson's surveys were made with no better instrumental aid than a compass and a sextant.

Out of appreciation of this fine tribute by Mr. Hunter and also of Dawson's work, the Canadian Government had set aside a piece of land around the monument. The monument itself is of cast iron and bears an inscription as shown in the accompanying photograph. It is situated on the right bank of Liard river just north of the boundary line between British Columbia and Yukon.

An account of the expedition, in the course of which the original post was planted, is contained in the Annual Report of the Geological Survey, volume 3, 1887-88.

FIELD AND OFFICE WORK

Fifty field parties were sent to widely separated parts of Canada during the season of 1927. Thirty-six were engaged in geological work, thirteen in topographical surveying, and one in collecting minerals for the museum. Short accounts of the field work of these parties and of the laboratory and office work accomplished during the rest of the year are given in the following statements by the chiefs of divisions.

GEOLOGICAL DIVISION

G. A. Young, Chief Geologist, reports:

Yukon

W. E. Cockfield geologically and topographically explored an area of about 2,000 square miles in the vicinity of Dezadeash lake, southwestern Yukon. A main reason for undertaking this work was to outline a part of the western border of the Coast Range batholith, a body with which many important mineral deposits are associated in Yukon and British Columbia. Mr. Cockfield also examined ore deposits at Fifteenmile creek on Yukon river below Dawson; at Rude creek; and at Whitehorse. A report upon Dezadeash Lake area, accompanied by a map and short reports upon the ore deposits of the three localities mentioned, appears in Summary Report, 1927, Part A.

British Columbia

Victor Dolmage made a survey of the economic minerals in the part of northern British Columbia drained by Finlay river. Much interest has been displayed in this district following upon reports of the finding of important mineral deposits. A report and geological map of the area is published in Summary Report, 1927, Part A.

F. A. Kerr continued topographical and geological mapping of a strip of country along Stikine river from Telegraph Creek south to the International Boundary. During the last two seasons an area of about 1,000 square miles has been surveyed and studied. A part of the east margin of the Coast Range batholith lies within the area which, therefore, is of prospective importance as a mineral-bearing district.

George Hanson completed the geological study and mapping of an area of 200 square miles embracing part of the drainage basins of Bear and Marmot rivers in the vicinity of Stewart on Portland canal, where many mineral deposits, valuable chiefly for their lead, zinc, and silver contents, have been found. A memoir upon the work and two geological maps are in course of preparation.

J. R. Marshall commenced a geological and topographical survey of a hitherto unexplored and little prospected area stretching from the headwaters of North Thompson river west towards Clearwater lake. A brief, preliminary report upon the work so far as it has progressed is included in Summary Report, 1927, Part A.

C. E. Cairnes completed the study of the geology and ore deposits of Slocan mining area. During the past season geological field work was extended southward to include an adjoining map-area of 380 square miles, which includes New Denver, Silverton, Slocan City, and Sandon. Many mining properties and undeveloped mineral deposits lie within the two map-areas.

H. S. Bostock completed the detailed study of the gold-arsenic and other mineral occurrences at Hedley, and commenced geological mapping of an area

of about 400 square miles east from Similkameen river. Mr. Bostock also examined the Horne silver mine, 6 miles from Similkameen station. A report on this mine is published in Summary Report, 1927, Part A.

J. F. Walker, assisted by H. C. Gunning, completed the study of the geology and mineral resources of Lardeau area; a final report and geological map are being prepared. Messrs. Walker and Gunning also made a geological and geographical reconnaissance of Fry Creek basin and of several other areas along the east side of Kootenay Lake valley.

C. S. Evans continued detailed geological mapping of the territory bordering Columbia River valley. During 1927 he examined an area of more than 400 square miles immediately west of Golden. A memoir and maps representing the work of 1927 and preceding years are being prepared.

A. Anrep made a detailed examination of certain peat bogs near Vancouver and visited other peat bogs in the same general area and on Vancouver island. The investigation was made for the purpose of determining the suitability of the deposits for the manufacture of peat litter. A report presenting the results obtained appears in Summary Report, 1927, Part A.

Alberta

B. R. MacKay made a detailed geological survey of the Brûlé coal area on the Canadian National railway, 180 miles west of Edmonton. The results of this work, in the form of a report and map, will be presented in Summary Report, 1928, Part B.

G. S. Hume geologically mapped and studied an area of 150 square miles lying 20 miles west of Calgary and adjacent to Turner Valley oil and gas field. A preliminary report dealing with certain aspects of the 1927 field work is included in Summary Report, 1927, Part B.

Saskatchewan

F. H. McLearn commenced a systematic revision of the areal mapping, stratigraphy, and structure of southern Saskatchewan, similar to work in southern Alberta which has recently been completed and published (*See* Calgary sheet). He also investigated several localities where petroleum, gas, or other mineral occurrences were reported. A preliminary report is given in Summary Report, 1927, Part B.

Manitoba

W. A. Johnston continued the investigation of the surface geology, including the soils, of southern Manitoba and southeastern Saskatchewan. The geological mapping of the surface deposits of the areas covered by the Emerson, Virden, Turtle Mountain, and the greater part of the Winnipeg sectional maps was completed. The field work in Manitoba will, probably, be completed in 1928, after which it is proposed to prepare a report and map.

E. M. Burwash studied and mapped the geology of an area in the vicinity of Kississing (Cold) lake, 140 miles northwest of lake Winnipeg. The district is of importance because of mineral deposits already discovered. Mr. Burwash also examined a number of mineral occurrences along the route from Sturgeon Landing to Kississing lake.

J. F. Wright made a geological reconnaissance of about 1,000 square miles in Island Lake area, northeastern Manitoba. Considerable areas were outlined which, other conditions being favourable, may hold important mineral deposits. Summary Report, 1927, Part B, contains a report and map giving the results of the reconnaissance.

C. H. Stockwell concluded an investigation of the lithia-bearing pegmatites and associated rocks of southeastern Manitoba and adjacent parts of Ontario. The region explored has an area of 2,500 square miles.

Ontario

H. M. Bannerman completed the detailed examination of pyrite and iron-bearing formations in the vicinity of Nickel and Pipestone lakes, Rainy River district, and Staunton on the Canadian National railway, Thunder Bay district. Mr. Bannerman commenced a detailed study of the Timagami iron range, Nipissing district.

T. L. Tanton investigated many of the mineral deposits in the Port Arthur silver-bearing area, which borders lake Superior for 125 miles from Nipigon southwest to Arrow lake. The results of this work will be incorporated in a memoir now being prepared.

R. C. Emmons concluded the geological survey of the Woman River and Ridout quadrangles. Promising lead-zinc deposits, as well as other types of mineral deposits, occur within the district. The two maps and accompanying memoir are being prepared for publication.

T. T. Quirke completed a geological survey of the Key Harbour quadrangle, which borders the northeast corner of Georgian bay. The area holds deposits of non-metallic minerals of probable economic value. The geological map and report are being prepared.

W. H. Collins, assisted by R. Thomson, completed the geographical and geological mapping of Espanola quadrangle, which lies immediately west of the Sudbury nickel basin. The geological map of the area is being prepared for publication. Field work was extended to the adjoining map-area to the east, which includes part of the Sudbury nickel basin. Mr. Thomson began a special study of the nickel-bearing irruptive and various associated igneous formations.

C. Tolman, under the supervision of W. H. Collins, continued the mapping and studying of the Birch Lake granite, a body that extends an unknown distance northward from Espanola map-area.

G. M. Brownell, under the supervision of M. E. Wilson, geologically mapped the district in Leeds county represented by the southeast part of the Westport sheet of the Department of National Defence. Deposits of mica, iron ore, and galena occur within the area studied.

Quebec

H. C. Cooke made detailed geological examinations of various mineral deposits in Rouyn district, western Quebec. The results obtained will be incorporated in a memoir on the geology and mineral deposits of the entire Rouyn district.

W. F. James reinvestigated the geology and examined the principal mineral discoveries within Duparquet quadrangle, Rouyn district. A revised edition of the geological map is being prepared. An account of the mineral occurrences will be included in the memoir on Rouyn district above mentioned.

J. B. Mawdsley geographically and geologically explored the Kaopotina-Father Lakes area, about 1,700 square miles in extent and situated southwest of Chibougamau lake. West of Chibougamau lake, an area of 70 square miles, in which mineral deposits occur, was investigated in some detail. Routes leading from Monet station, Canadian National railway, to the main field of work were geologically surveyed. An account of this work appears in Summary Report, 1927, Part C.

T. H. Clark commenced studying and mapping the area in southeast Quebec, represented by the Sutton sheet, Department of National Defence.

F. J. Alcock made a detailed study and geological map of an area of 20 square miles surrounding the Federal mine, central Gaspe. The results of this work are presented in Summary Report, 1927, Part C.

New Brunswick

W. V. Smitheringale examined various manganese occurrences in Nova Scotia and New Brunswick. Mr. Smitheringale also visited Michipicoten district, Ontario, for the purpose of investigating the manganese-bearing iron formations of that district. The information relating to manganese is to be incorporated in a report on the manganese deposits of Canada. Several lead-zinc occurrences in Ontario were examined by Mr. Smitheringale.

F. J. Alcock examined a number of mineral deposits in New Brunswick and Nova Scotia. The information obtained concerning various lead-zinc deposits will appear in a report on the lead-zinc deposits of Canada.

Nova Scotia

E. R. Faribault continued the systematic geological survey of Nova Scotia. The area surveyed in 1927 completes the Digby quadrangle.

G. W. H. Norman, under the supervision of W. H. Bell, commenced the geological study and mapping of Ainslie quadrangle, Cape Breton. A main purpose of the work is a re-study of the Port Hood, Mabou, and Inverness coal fields.

Northwest Territories

L. J. Weeks returned from the Arctic in the autumn of 1927 after spending two summers and a winter geographically and geologically exploring the territory bordering and extending west from Cumberland sound, southeastern Baffin island. A report on the several seasons' work appears in Summary Report, 1927, Part C.

TOPOGRAPHICAL DIVISION

W. H. Boyd, Chief Topographical Engineer, reports:

During the year topographical and geographical surveys were carried out in British Columbia, Alberta, Ontario, Quebec, New Brunswick, and Nova Scotia.

British Columbia

A. C. T. Sheppard revised the Vancouver sheet, one inch to one mile. This area was mapped in 1920 and a comparison of the two maps furnishes striking evidence of the growth and expansion of the city since that time. Illness unfortunately forced Mr. Sheppard to give up field work the first of August. He was unable to undertake the detailed mapping of the Corbin coal areas.

Mr. Sheppard visited in the field the parties of J. W. Spence and J. A. Macdonald in order to advise on any matters relating to the field work.

J. A. Macdonald carried out the topographical mapping of a portion of the Topley quadrangle, latitude 54° 30′ to 54° 45′ north, longitude 126° 00′ to 126° 30′ north. This map is for publication at one inch to one mile with contour interval 100 feet.

Alberta

D. A. Nichols completed the east half of Jumpingpound quadrangle, latitude 51° 00′ to 51° 15′ north, longitude 114° 30′ to 114° 45′ west, and extended this mapping in a northwesterly direction. This work is part of a series of sheets on one inch to one mile covering the potential oil areas southwest of Calgary.

On his way to the field Mr. Nichols visited a landslide and change in the channel of Blanche river at Wawbewawa, Ontario. This was interesting from a physiographic standpoint and also from the economic side in showing the possibility of other slides under similar conditions. Both aspects are being considered in a special paper by Mr. Nichols.

J. W. Spence completed a topographical survey of Turner Valley quadrangle, latitude 50° 30′ to 50° 45′ north, longitude 114° 00′ to 114° 30′ west, and mapped portions of the Bragg Creek quadrangle, east half, latitude 50° 45′ to 51° 00′ north, longitude 114° 30′ to 114° 45′ west. The Bragg Creek sheet has a contour interval of 100 feet and the Turner Valley sheet an interval of 50 feet; both are for publication at one inch to one mile.

Ontario

A. G. Haultain carried out surveys in Rutter quadrangle, latitude 46° 00′ to 46° 15′ north, longitude 80° 30′ to 81° 00′ west, and Key Harbour quadrangle, latitude 45° 45′ to 46° 00′ north, longitude 80° 30′ to 81° 00′ west. These are geographical sheets for publication on a scale of one inch to one mile. He also extended the control, carried out the previous year, for the Espanola sheet, and carried out a number of surveys in Sudbury district for the control of mapping from aerial surveys.

Quebec

R. C. McDonald completed control surveys for the Taschereau sheet, Quebec, latitude 48° 30′ to 48° 45′ north, longitude 78° 30′ to 79° 00′ west. He also completed the primary traverse of the Canadian National Railways branch line to Rouyn and established a base to be used in the detailed mapping of the vicinity of Rouyn. The Taschereau sheet is for publication at one inch to one mile. Drainage and minor details on the Taschereau sheet will be put in from air photography.

K. G. Chipman commenced a detailed map, on a scale of 1 inch to 400 feet with 5-foot contours, to include the area in the vicinity of Noranda and Rouyn. This work is so arranged as to be easily extended as the development of the area may warrant.

New Brunswick

H. N. Spence completed the Carleton sheet, Quebec and New Brunswick, latitude 48° 00′ to 48° 15′ north, longitude 66° 00′ to 66° 31′ west. This work, commenced in 1926 and completed in 1927, is for publication at one inch to one mile.

R. Bartlett completed the surveys for the west half of the Loch Lomond sheet, latitude 45° 15′ to 45° 30′ north, longitude 65° 30′ to 66° 00′ west; and the Cape Spencer sheet, latitude 45° 00′ to 45° 15′ north, longitude 65° 30′ to 66° 00′ west. This sheet is for publication at one inch to one mile, and the drainage, with some minor detail of roads and culture, will be put in from vertical aerial photography.

K. G. Chipman mapped topographically on 1 inch to 1,000 feet the drainage basin of the Chamcook lakes near St. Andrews. This work was at the request of the Biological Board of Canada, who are conducting experiments in fish culture in these lakes and require a detailed map on which to plan their work and to show their information.

Mr. Chipman visited in the field the parties of R. C. McDonald, J. V. Butterworth, and H. N. Spence, in order to advise on any matters relating to the field work.

Nova Scotia

J. V. Butterworth started a geographical survey of Ainslie quadrangle, Nova Scotia, latitude 46° 00′ to 46° 15′ north, longitude 61° 00′ to 61° 30′ west. This area includes the coal fields at Inverness and Port Hood.

S. C. McLean, assisted by S. M. Steeves, junior topographical engineer, carried out the triangulation and traverse control of the Ainslie sheet; the triangulation control of the east half of the Oxford sheet; and the primary control traverse of the Port Mouton sheet in southwestern Nova Scotia. The work in southwestern Nova Scotia is now consolidated, the work of 1927 being tied in with the work of 1924, and also connected with the work of the Geodetic, the Topographical, and Hydrographic Surveys.

W. H. Miller completed surveys for the Oxford sheet, latitude 45° 30′ to 45° 45′ north, longitude 63° 30′ to 64° 00′ west. This sheet is for publication at one inch to one mile.

The following maps were completed for publication during the year:

Province	Map-sheet	Latitude and longitude	Scale
British Columbia	Topley	54° 30′ to 54° 45′ 126° 00′ to 126° 30′	1 inch to 1 mile
Alberta	Bragg Creek—east half	50° 45′ to 51° 00′ 114° 30′ to 114° 45′	1 inch to 1 mile
	Jumpingpound—east half	51° 00′ to 51° 15′ 114° 30′ to 114° 45′	1 inch to 1 mile
Ontario	Key Harbour	45° 45′ to 46° 00′ 80° 30′ to 81° 00′	1 inch to 1 mile
	Rutter	46° 00′ to 46° 15′ 80° 30′ to 81° 00′	1 inch to 1 mile
	Ridout	47° 30′ to 47° 45′ 82° 30′ to 83° 00′	1 inch to 1 mile
Quebec-New Brunswick	Escuminac	48° 00′ to 48° 15′ 66° 00′ to 66° 30′	1 inch to 1 mile
New Brunswick	Chamcook Lake drainage basin		1 inch to 1,000 feet
Nova Scotia	Digby	44° 30′ to 44° 45′ 65° 30′ to 66° 00′	1 inch to 1 mile
	Granville Ferry	44° 45′ to 45° 00′ 65° 30′ to 66° 00′	1 inch to 1 mile
	Oxford—west half	45° 30′ to 45° 45′ 63° 45′ to 64° 00′	1 inch to 1 mile

In connexion with the work of the enlarged Niagara Board, and at the request of Mr. Charles Camsell, one of the Canadian representatives, the chief topographical engineer undertook a precise survey of the crest lines of the Horseshoe and American falls. This work was successfully completed early in April, 1927, with the assistance of A. C. T. Sheppard and K. G. Chipman. An account of this survey is to be published by the Geological Survey.

Continuing his work in physiography, D. A. Nichols has selected and described slides and views illustrating Canadian physiography. Some of these have been added to our own series, some have been sent to universities and to Geneva, and many others have been supplied for illustrating lectures and scientific text books. Relief models of the Fort William-Port Arthur and Kokanee Park map-sheets have been prepared and are now on exhibition in Ottawa and elsewhere.

Reference to Mr. Nichols' visit to the Wawbewawa landslide is made in the report on field work.

Computations of the geographical positions of the permanent marks established in northern Manitoba along, and east of, Nelson river, including Hayes river, Fox river, Oxford lake, Gods lake, and Island lake, have been completed and supplied to the Topographical Surveys Branch, Department of the Interior, for use in their maps. Computation of the geographical positions of the permanent marks established in southwestern Nova Scotia, and along the Canadian National railways, Rouyn branch, have been completed. These positions are available on request to the Director.

MINERALOGICAL DIVISION

Eugene Poitevin, Chief of the Division, reports:

Owing to the steadily increasing interest shown by the public in the mining industry of Canada, the volume of work performed this year by this division was almost double that of any previous year.

FIELD WORK

A. T. McKinnon spent two months in Ontario and Quebec collecting minerals required for the preparation of our educational collections.

LABORATORY WORK

About 2,000 rock and mineral specimens for examination were received from geologists, mining engineers, prospectors, educational institutions, etc., over half of these being sent by prospectors. Prospectors are showing greater knowledge of geology and mineralogy and a greater capacity for appreciating the results of scientific investigation of the samples submitted. A great part of this progress is due to special instruction. Ontario, with its School of Mines at Haileybury and its travelling prospectors' classes, and British Columbia with its excellent work carried on by the Chamber of Mines at Vancouver and the associated Boards of Trade of that province, contribute effectively to the welfare of the mining industry. More recently Alberta, Quebec, New Brunswick, and the other provinces have taken similar praiseworthy action.

During the fiscal year just ended, Eugene Poitevin and H. V. Ellsworth have furnished, in addition to numerous verbal reports, more than 2,000 reports dealing with mineralogical problems. Mr. Poitevin completed studies on the various minerals described in the recently published Bulletin No. 46. H. V. Ellsworth also has continued his studies of the Canadian rare elements, and the preparation of the forthcoming report dealing with this subject. Seven papers were published by H. V. Ellsworth in the American Mineralogist and the Mineralogical Magazine. The titles of these papers are given in the deputy minister's statement in this report.

R. J. C. Fabry has carried out the analyses of three granites from Killarney, Ontario, for W. H. Collins and T. T. Quirke; one garnet-sillimanite rock from Ceylon for Dr. Frank D. Adams; one chlorite schist for C. E. Cairnes; one chromium-bearing, dolomitized rock for H. C. Gunning; and three specimens of

diamond-drill core. He has also made complete chemical analyses, for C. H. Stockwell, of the following minerals, which were obtained from the Silver Leaf Mining Syndicate, lot 17, range 16, township 16, southeastern Manitoba: spodumene, lepidolite, montebrasite, pink muscovite, lithiophyllite, margarodite, lithium-bearing muscovite, beryl. He has also analysed one specimen of hydrotalcite from Vimy Ridge, Megantic county, Quebec. The results of these analyses will be published in reports by the geologists above named.

MUSEUM WORK

The work of rearranging and cataloguing the systematic collections of Canadian and foreign minerals is being continued, but owing to the bad condition these collections were in, it will be some time before the work can be completed. The services of Dr. W. F. Ferrier were obtained again this year from January 3, 1928.

Cases of economic minerals which were formerly displayed at 227 Sparks street have been moved to the Museum. Altogether 34 cases of temporary exhibits have been put in the National Museum, more than 20 of which were put in during the fiscal year just ended.

Several fine specimens were added to the collections by purchase and by donations, an itemized list of which is given in the annual report of the National Museum.

EDUCATIONAL COLLECTIONS

The demand for collections Nos. 1, 2, 3, prospectors' sets, etc., has been very heavy this year, as shown by the following table. The magnitude of this work is indicated by the fact that 12,406 specimens were used in the collections and 22 tons of rocks and minerals required. These collections are sold to universities, high schools, and other educational institutions, in foreign countries as well as in Canada. Descriptive circulars are obtainable on request from the Director of the Geological Survey.

Province	Standard	Grade II	Grade III	Grade IV	Miscellaneous	Prospectors	Mineral chips	Keg
British Columbia	2	0	0	0	2	18	1	0
Alberta	0	0	1	0	7	5	1	1
Saskatchewan	0	1	1	0	1	3	0	0
Manitoba	1	0	0	0	1	4	0	0
Ontario	4	1	35	0	17	80	1	0
Quebec	10	0	2	50	9	49	2	0
New Brunswick	1	1	0	0	6	1	1	0
Nova Scotia	2	0	1	0	1	1	0	0
Foreign	3	0	1	0	11	2	0	0
Total	23	3	41	50	55	163	6	1

Total collections distributed = 342.

PALÆONTOLOGICAL DIVISION

E. M. Kindle, Chief of the Division, reports:

FIELD WORK

W. A. Bell was in Nova Scotia from June 5 to July 8 on a geological reconnaissance of the area comprising Port Hood, Mabou, and Inverness coal districts.

E. M. Kindle examined in June parts of the Welland Canal section, in the interest of the Department of Railways and Canals. The remainder of the field season was spent in Jasper park, Alberta.

F. H. McLearn was engaged in mapping and studying the structure of the eastern end of the Cypress hills in southwestern Saskatchewan. More than four months were spent in the field.

Miss A. E. Wilson was occupied during the larger part of a month in field work in the Cornwall quadrangle.

OFFICE WORK

The office work of W. A. Bell comprised preparation of a geological map of Pictou coal fields, additions to a memoir upon the geology of the Horton-Windsor formations of Nova Scotia and New Brunswick, and reports on the following collections of fossil plants:

(*a*) From Brûlé coal-field, Alberta, for B. R. MacKay.
(*b*) From Brazeau formation, Stirco and Coal valley, Alberta, for B. R. MacKay.
(*c*) From Ravenscrag formation, Sask., for F. H. McLean.
(*d*) From Jasper park, Alberta, for E. M. Kindle.
(*e*) From Sextant rapids, Abitibi river, Ont., for W. S. Dyer.
(*f*) From the Milk River, St. Mary River, and Willow Creek formations, Alberta, for W. S. Dyer and M. Y. Williams.
(*g*) Tertiary plants gathered by H. S. Bostock from White Lake district, B.C.

E. M. Kindle prepared a report on the geology of Jasper National park for the Commissioner of Canadian National parks. Articles were also prepared on certain sections in Jasper park, and on the character of the bottom deposits of lake Cavell, a glacial lake. Correlation reports based on fossils were prepared for members of the staff.

F. H. McLearn was, during a considerable part of the winter, occupied with the preparation of map, sections, and report on the eastern end of Cypress hills, published in the Summary Report, 1927, Part B. A report was prepared on collections of Mesozoic fossils received from the Hudson's Bay-Marland Oil Company, and collections made by G. S. Hume and other members of the geological staff. A short paper entitled "Some Canadian Jurassic Faunas" was published in the Transactions of the Royal Society of Canada. A first contribution to the Jurassic Ammonoidea of Skidegate inlet was completed, and is published in Museum Bulletin No. 54. A short paper on some new Jurassic ammonoids from the Fernie formation of western Alberta was handed in for publication. The study of Jurassic ammonoids from Skidegate inlet was continued. Some progress was made in the study of Upper Triassic ammonoids from the Schooler Creek formation, upper Peace river, B.C.

Miss A. E. Wilson was absent doing university post-graduate work during the first three months of the year. The remainder of the office work was devoted to carrying on the type catalogue re-identification.

C. M. Sternberg has prepared descriptions of two new armoured dinosaurs and has identified collections of vertebrate fossils sent in for determination.

Miss M. A. Fritz was engaged during July and August in grading, identifying, and labelling fossils in the old collections.

MUSEUM WORK

A considerable number of collections of fossils were sent out for the use of high schools. Two colleges were also supplied with study collections. An account of the specimens received and prepared for museum display is given in the annual report of the National Museum.

BORINGS DIVISION

E. D. Ingall, Chief of the Division, reports:

The Borings Division of the Geological Survey exists for the specific purpose of securing records of borings made throughout Canada in search for water, petroleum, natural gas, etc. It is now recognized universally that the

collecting of reliable data illustrative of the nature and structure of the strata passed through in boring is of the utmost importance for the intelligent direction of the efforts to locate gas, oil, water, etc. This work is carried on in co-operation with operators, and in some provinces with the assistance of the provincial and federal government organizations, and results in the building up of extensive reference files of well records sent in by drillers, geologists, and others.

Whenever possible, complete sets of samples are obtained from the operators. These samples are taken at intervals of 10 feet or less, with a view to acquiring an intimate knowledge of the characteristics of the various strata by means of microscopic, mechanical, and chemical examination of the cuttings, and the interpretation of any fossil evidence. Light is thus thrown on the conditions, favourable or unfavourable to the existence of gas, oil, or water in commercial quantities, such as the existence or absence of porosity, favourable structures, etc. Careful search of the cuttings is made for fossil forms, which often constitute the only evidence distinguishing strata of different geological ages, and, therefore, of different position in the succession of the strata. The small microscopic forms have to be thus relied upon, the larger fossils being destroyed by the process of drilling, except in the rare cases where a core drill has been used.

In many parts of Canada the obtaining of supplies of water pure enough for domestic use and free enough from mineral contents to be suitable for irrigation is limited to that held in the surface deposits overlying the bedrock strata, and efforts to obtain records from local drillers have been constantly made and the resulting logs incorporated in the reference files of the division. To obtain and retain the co-operation of thousands of local shallow well-drillers is a difficult task, and much remains to be done in this direction. This problem might be solved in the future by endeavouring to enlist the interest of the local drillers in the formation of drillers' organizations such as those recently started in the United States. The annual conventions held by these bodies have a great educational effect and could be used as a means of interesting their membership in the utilization of the Borings Division as a clearing house for the results of all the scattered borings, to the advantage of both drillers and their clients.

During the first fifteen years of existence of the Borings Division—it was created in 1908—the collecting of records and samples occupied a large part of the time of the small staff. In response to requests from drillers for interpretative advice, the determination of geological horizons and other geological conditions encountered in the various borings through the study of the samples received was necessarily confined to such preliminary chemical and microscopic examinations as could be made with the limited means at disposal. However, a large mass of borings data was accumulated and systematically filed, and a great quantity of sample material was collected and systematically arranged in sets representing some hundreds of borings and illustrative of the geology in depth of various parts of Canada. The number of samples of cuttings now on hand is about 70,000, besides sets of cores from various wells put down with the core drill. Though only a part of this accumulation has so far received preliminary study, it represents material which could only be obtained during the progress of the borings and will doubtless yield valuable detailed knowledge of the strata penetrated when more intensive research methods, now available, can be applied to it. In future years new questions will probably arise upon which light can be thrown by applying to this material improved research methods which will doubtless be developed, so that the sample material accumulated has not only a present but also a future value. A very good example of such unforeseen

needs lies in the utilization, in recent years, of the foraminifera and other small fossil forms in determining geological horizons as encountered in borings in the Cretaceous and younger formations of the western parts of the continent.

The falling off in late years of activity in the Ontario gas and oil districts, owing to near exhaustion of the pools at present known, has been offset by the very large increase in the operations in the Prairie Provinces. As a result of the increasing activities in western Canada, the staff of the division was increased in 1923 by the appointment of Mr. D. C. Maddox, who was entrusted with the work of sample examination, and this phase of the work has been gradually expanded and laboratory equipment developed. In the Prairie Provinces the preliminary determination of samples has been taken over by officials of the North West Territories and Yukon Branch of the Department of the Interior, in whom is vested the power to regulate all boring operations for gas and oil, but they supply samples to the Borings Division for more intensive geological, mineralogical, and chemical study.

The work of the Borings Division falls into two groups.

(1) The carrying out of the general policy of keeping in touch with boring activities throughout Canada and maintaining co-operative relationships with operators so as to secure logs, sets of samples, and all possible boring data. It includes also the systematic filing of all the information acquired and its utilization in aiding operators to solve the geological problems encountered, using also all information available in the geological literature dealing with Canada and the United States.

(2) Examination in the laboratory of samples collected and the preparation of well logs based on the results thus obtained. Reports descriptive of the methods adopted and of results attained, will be found in Parts B and C of the Summary Report of the Geological Survey, 1927.

During the past year important additions have been made to the equipment of the laboratory, and the staff was strengthened by the addition of F. J. Fraser, a graduate of Birmingham University, who is assisted by M. Mahoney. For the first time in the history of the division two men were able to give their undivided attention to the work of sample examination. As a result of this arrangement, and of Mr. Fraser's experience in laboratory methods as applied to sedimentary materials, it has been possible to greatly enlarge the scope of the laboratory work.

Apart from the routine examination of sets of samples, resulting in the geologically descriptive logs of the wells examined, special attention has been directed to the investigation of the possibly diagnostic value of the heavy mineral constituents of the samples of borings. These were separated by panning, microscopic slides were prepared, and their mineralogical characters determined under the microscope. These slides were prepared and filed for reference. Speaking of this work Mr. Fraser reports on the results of examination of material from the Prairie Provinces: "Few of the slides have been described in detail, but from the results of examination now being carried out many interesting points are evolving. With especial reference to the Turner Valley material, the slides already made represent mainly the Benton shale residues, characterized by apatite, tourmaline, and zircon with perhaps a limited range of spherical and octahedral pyrite. Blairmore residues, so far examined, also show garnet, and work in the near future should confirm and limit the range of this mineral in pre-Benton strata. A few post-Benton residues have been separated and examined and these invariably contain a much greater variety of minerals than the older beds. Epidote, garnet, and perhaps andalusite have been noted."

In addition to the above, tests for oil are made in many instances, using the distillation method and treatment with carbon tetrachloride. In the deter-

mination of limestone and dolomite horizons tests are made with cold and hot acid. Where called for, chemical tests for sulphates have been made. The proportions of material of different fineness have in some cases been determined by mechanical separation by sieves.

Of the work of investigating the minute fossil forms contained in the drill cuttings, with a view to determining their value as horizon markers, Mr. Maddox reports as follows: "During 1927 the work of collecting foraminifera from cuttings from borings in the Cretaceous shales of the western provinces was chiefly done by Mr. R. T. D. Wickenden, a student assistant attached for the summer months to the Borings Division. Mr. Wickenden is specializing in work of this nature and on his return to Harvard University undertook the study of these forms under Dr. J. A. Cushman. It is hoped that the work will be further extended during 1928 and will ultimately prove of great assistance in the task of working out the stratigraphy of the western Plains. Foraminifera have proved to be of the utmost value in the correlation of the Cretaceous formations in Texas by providing a basis for the location of stratigraphic horizons in a long series of shales which cannot be lithologically differentiated.

"In the western Plains of Canada the great thickness of the marine Cretaceous formation, largely shales, such as the Niobrara and Benton formations of the Colorado group, is in many cases inaccessible except by the use of the drill, and in the absence of surface exposures the stratigraphic position of samples within these formations is, in general, impossible to determine until the next underlying formation is reached. At present it is impossible in well samples to differentiate the marine Colorado shale from the overlying Lea Park marine shale of Montana age unless the two are separated by a lithological break as in the case of the Milk River sandstone. In the absence of surface geological information, this means that there will be a long succession, probably 2,000 feet or more, of shales indistinguishable lithologically from each other, and that the drill will have to penetrate to the underlying known marine formation before the stratigraphic position of the well is definitely known.

"The establishment of definite stratigraphic horizons within the marine shales at fairly shallow depths would be of inestimable value to the operator and would in many cases preclude the necessity of proceeding to the underlying known marine formations or would enable him to know the approximate depth at which he might expect to reach this latter. To the field geologist, the method might prove to be of great value, as enabling him to locate his stratigraphic position by the use of foraminifera when no other fossils were available."

Besides the laboratory work directly connected with the examination of well cuttings it has been possible to use the laboratory methods in assisting some of the field geologists, such as in the examination of a sample of volcanic ash from Cypress hills in Saskatchewan and of calcareous clay from the same province. Work has also commenced on samples of rocks, chiefly sandstones, collected by F. H. McLearn in southern Saskatchewan. Mr. Maddox reports: "The isolation and identification of the heavy minerals contained in these rocks formed the principal part of the work. Some mechanical analyses were also made. This work is likely to prove of much value as providing possible criteria for the identification of stratigraphic units in cases where fossils are absent."

Apart from the work done in examination of well cuttings from borings put down by either the churn drill or rotary methods, a certain amount of cores from wells put down by core drills have been available. Cores give, of course, much more definite results, being free from the uncertainties inherent in the fragmentary material produced by the ordinary drilling methods.

During the year samples have also been available for examination from a certain number of shallow wells bored to obtain local water supplies.

WORK DONE IN THE LABORATORY DURING THE YEAR[1]

	Samples examined
Wells of the Northern Foothills Group (including Turner Valley)	
Big Chief, British Dominion, Bow R. No. 1, Calmont No. 1, Dalhousie No. 5, Foothills No. 1, Home No. 1, Illinois Alberta No. 1, McLeod No. 2, McLeod No. 3, McDougall-Segur No. 1, Ranchman's No. 1, Regent No. 2, Royalite No. 5, Royalite No. 7, Seneca No. 1, Sentinel, Spooner No. 1, Stockmen's No. 1, Vulcan No. 1	4,965
Wells of the Southern Foothills Group	
Mount Royal No. 1	31
Wells of the Northern Alberta Group	
International Oils, Black Rock Petroleum No. 2, International Bitumen No. 1A	392
Wells of the Southern Plains of Alberta Group	
Devenish No. 1, Imperial Burdett, United Oils, Roth No. 2	1,205
Wells of the East Central Alberta Group	
Imperial Ribstone, Ribstone Oils No. 1	357
Wells of the Saskatchewan Group	
Simpson Oil Co.	45
Wells of the Manitoba Group	
Northern Manitoba Oil Co., W. J. Holmes Well No. 1	124
Wells of the Canadian National Railways Group	
19 shallow wells drilled for water supplies	285
Wells of St. Hyacinthe District, Quebec, Group	
Samples from 8 old wells for re-examination, Canadian Natural Gas Co. wells Nos. 1-5, National Gas Co. wells Nos. 1 and 2, St. Madeline	1,473
New Brunswick	
D'Arcy Exploration Co. Gautreau No. 2 (old well for re-examination)	360
Prince Edward Island	
Doherty Interests well No. 2 (Governor island, Charlottetown)	189
Sundry Other Examinations	
Volcanic ash, Cypress hills, Sask.; calcareous clay for W. A. Johnston; sandstone, etc., for F. H. McLearn, southern Saskatchewan; kaolin, northern Ontario; igneous rocks, various sandstones, Sydney Mines, N.S., etc.	

In regard to boring activities throughout Canada during the present year a condensed résumé follows:

In British Columbia and the Yukon deep boring activities were very limited and no samples and records were sent to the Borings Division. As in the past, no cognizance was taken of the doubtless very large amount of core drilling prosecuted in testing individual mineral deposits, as these would be of interest to the owners only and would add nothing to the understanding of the general geological problems of the region.

Boring activities of a nature coming within the scope of the Borings Division researches were mostly connected with the deep wells being put down in the Prairie Provinces in continuing the search for gas and oil, the chief operations centring in Turner Valley district in Alberta. Thanks to the co-operation of Mr. C. C. Ross, supervisory engineer of the North West Territories and Yukon Branch, Department of the Interior, the division has received sets of samples from most of the important wells put down in the Prairie Provinces in search for gas and oil. This material has been submitted to intensive study in the laboratory of the division, and the results of this research have been placed at the disposal of the field geologists of the Survey and of the officials of the Interior Department office in Calgary for advisory use in the service of the operators. A total of 12,657 samples were received from the Prairie Provinces from 101 borings, which included some from 18 shallow water wells. Records of 39 shallow wells were received.

[1]In the case of many wells the work done was in continuation of that commenced in 1926.

In eastern Canada little was reported in the way of deep borings. In Ontario the receipts of samples and logs were much less than formerly, boring activities being naturally much lessened as a result of the near exhaustion of the pools of gas and oil at present known, whose exploitation for nearly seventy years has been such an important economic factor in the peninsula of Ontario.

In the Palæozoic region of eastern Ontario and central Quebec, sporadic efforts to locate oil and gas pools have been described in previous reports and there was a slight revival of interest, but no borings were undertaken. In view of this re-awakened interest, the 1,473 samples on file, obtained from deep borings put down in 1914 to 1916 near St. Hyacinthe, which, from lack of time, had received only preliminary examination, were further studied in the laboratory. The possibilities of this large area underlain by undisturbed sedimentary strata can hardly be regarded as determined by the few and scattered deep borings already made.

In the Maritime Provinces little new information was available regarding the long established Moncton gas and oil field. In view of the very considerable amount of information (logs and samples) already accumulated by the Borings Division through the courtesy of Dr. J. A. L. Henderson, who is in control of the operations of the New Brunswick Gas and Oil Fields Company at Moncton, it was agreed that samples should be sent only from important new wells which did not duplicate those samples already received.

In Nova Scotia no particular deep boring operations were reported, although some efforts were made by the International Petroleum Company and the Eastern Gulf Company bored a number of shallow holes to demonstrate structure at a number of points. Nothing conclusive was reported, however. In a province such as this where mining is active, a considerable amount of core drilling is always being prosecuted with the drills of the local Government Mines Department. The policy of the Borings Division being to confine itself to borings which throw light upon district geological problems, no records are sought of such borings as are of interest only to private owners of mineral deposits.

The outstanding interest in the Maritime Provinces centred in the deep boring put down by the Henry L. Doherty Company to test for oil on Governor island near Charlottetown, P.E.I. Samples were received last year from this company's No. 2 well to a depth of 4,127 feet, at which depth boring was suspended for the winter. On the resumption of work in the spring of 1927 the well was continued to a depth of 5,965 feet when operations were finished without encountering any definite change of formation. Samples to a depth of 5,870 feet were received and examined in the laboratory and the results communicated to the company.

DRAUGHTING AND REPRODUCING DIVISION

C.-Omer Senécal, Geographer, and A. Dickison, Chief, Draughting and Reproducing Division, jointly report:

Maps Published April 1, 1927, to March 31, 1928

Series A	Publication number	Title	Remarks
		YUKON	
192A	2124	Aishihik Lake area; scale, 1 inch to 4 miles	Geology. In report by W. E. Cockfield, Summary Report, part A, 1926
		ONTARIO	
194A	2134	Wakomata Lake area, Algoma district; scale, 1 inch to 1 mile	Geology. In report by R. C. Emmons, Summary Report, part C, 1926
		NOVA SCOTIA	
39A	1185	Nova Scotia sheet; scale, 1 inch to 8 miles	Geology. Second edition

Maps in Hands of King's Printer, March 31, 1928

Series A	Publication number	Title	Date of requisition	Remarks
—	1726	Athapapuskow Lake region, Manitoba and Saskatchewan; scale, 1 inch to 3 miles	Mar. 16, 1928	Geology. Reprint
—	1801	Reed and Wekusko Lakes region, Manitoba; scale, 1 inch to 2 miles	Mar. 16, 1928	Geology. Reprint
193A	2130	Stewart sheet (west half), Cassiar district, British Columbia; scale, 1 inch to 1 mile	Mar. 19, 1928	Topography
195A	2137	Beresford and Rice Lakes area, Manitoba; scale, 1 inch to 1 mile	Dec. 22, 1928	Geology. For memoir by J. F. Wright
196A	2138	Vancouver sheet, British Columbia; scale, 1 inch to 8 miles	Jan. 10, 1928	Geology
197A	1939	Fort William and Port Arthur sheet, Thunder Bay district, Ontario; scale, 1 inch to 1 mile	Mar. 23, 1928	Geology (surface deposits). For memoir by T. L. Tanton
198A	2141	Fort William and Port Arthur sheet, Thunder Bay district, Ontario; scale, 1 inch to 1 mile	Mar. 23, 1928	Geology (bedrock geology). For memoir by T. L. Tanton
200A	2144	Slocan sheet, Kootenay district, British Columbia; scale, 1 inch to 1 mile	Mar. 26, 1928	Topography
203A	2149	Thunder Cape sheet, Thunder Bay district, Ontario; scale, 1 inch to 1 mile	Mar. 23, 1928	Geology. For memoir by T. L. Tanton
204A	2150	Calgary sheet, Alberta; scale, 1 inch to 8 miles	Mar. 3, 1928	Geology
—	2151	Sections supplementing Map 204A, Calgary sheet, Alberta	Mar. 2, 1928	Geology

Other Map-Work in Varying Stages of Progress

—	Title	Remarks
	YUKON	
1	Dezadeash Lake area; scale, 1 inch to 4 miles	Geology. For report by W. E. Cockfield, Summary Report, part A, 1927
	YUKON AND BRITISH COLUMBIA	
1	Atlin sheet, latitudes 58° to 61°, longitudes 131° to 139°; scale, 1 inch to 8 miles	Geology
	BRITISH COLUMBIA	
1	Finlay River area, Cassiar district; scale, 1 inch to 8 miles	Geology. For report by V. Dolmage, Summary Report, part A, 1927
2	Britannia Beach sheet, New Westminster district; scale, 1 inch to 1 mile	Geology. For memoir by H. T. James
3	Copper Mountain mining area, Similkameen district; scale, 1 inch to 1,000 feet	Geology. For memoir by V. Dolmage
4	Stewart sheet (west half), Cassiar district; scale, 1 inch to 1 mile	Geology. For memoir by G. Hanson
5	Bear River sheet (west half), Cassiar district; scale, 1 inch to 1 mile	Topography and geology. For memoir by G. Hanson
	ALBERTA	
1	Cadomin sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
2	Cadomin sheet (west of fifth meridian); scale, 1 inch to 1 mile	Geology. For memoir by B. R. MacKay
3	Mountain Park sheet (west of fifth meridian); scale, 1 inch to 1 mile	Topography
4	Mountain Park sheet (west of fifth meridian); scale, 1 inch to 1 mile	Geology. For memoir by B. R. MacKay
5	Cadomin-Luscar coal basin; scale, 1 inch to 2,000 feet	Geology. For memoir by B. R. MacKay
6	Brûlé Mines area; scale, 1 inch to 1,000 feet	Geology. For report by B. R. MacKay, Summary Report, part B, 1927
	SASKATCHEWAN	
1	Cypress Hills area, southwest Saskatchewan; scale, 1 inch to 1 mile	Geology. For report by F. H. McLearn, Summary Report, part B, 1927
	ONTARIO	
1	Lake Huron sheet; scale, 1 inch to 8 miles	Geology. Revision and reissue of Map 155A
	QUEBEC	
1	Piedmont sheet, Abitibi county; scale, 1 inch to 1 mile	Geology
2	Dubuisson sheet, Abitibi county; scale, 1 inch to 1 mile	Geology
3	Mineralized belt, Lemieux township, Gaspe county; scale, 1 inch to ¼ mile	Geology. For report by F. J. Alcock, Summary Report, part C, 1927
	NOVA SCOTIA	
1	Mahone Bay sheet, No. 88, Lunenburg county; scale, 1 inch to 1 mile	Geology
2	Bridgewater sheet, No. 89, Lunenburg county; scale, 1 inch to 1 mile	Geology

In addition to the foregoing, eighty map and related figure illustrations were prepared for reproduction by zinc-cut process; draughting and other work necessary for the use of the geological staff was also executed.

The duties of the Geographer in connexion with the Geographic Board of Canada have, as usual, been attended to. The Geographer has in progress the preparation of a report and the computations for a "Transverse Polyconic Projection for General Maps of Canada".

PHOTOGRAPHIC DIVISION

G. G. Clarke, Chief of the Division, reports that the following work was accomplished during the year. A steadily increasing share of this output during recent years has been for other branches of the Department and for the public, to whom photographs for lectures, articles, and many other purposes are sold at cost.

	Inches	Inches	Number
Contact prints	4 by 5 to 36	by 48	14,904
Bromide enlargements	4 by 5 to 40	by 72	289
Exposures developed	3¼ by 4¼ to 6½	by 8½	4,309
Dry plate negatives	4 by 5 to 11	by 14	623
Wet plate negatives	8 by 10 to 24	by 30	125
Zinc plates	11 by 14 to 24	by 36	21
Photostat copies	7 by 11 to 11	by 14	95
Lantern slides	3¼ by 4		587
Photos and titles mounted			2,203
Total			23,156

GEOLOGICAL INFORMATION AND DISTRIBUTION DIVISION

Wyatt Malcolm, Chief of the Division, reports:

The work of the division consists in answering inquiries for information regarding the geology and mineral resources of Canada. This information is imparted verbally to those making application in person, and is given in the form of correspondence, memoranda, and published reports and maps. A considerable part of the technical correspondence of the Geological Survey is dealt with.

Articles were prepared during the year for publication in the *Gazette*, the *Globe*, the British press, and the Canada Year Book. These articles dealt with such subjects as the importance of the mineral industry of Canada, the status of the industry, and the progress made. Numerous short articles were prepared for the use of the press, and were well received. In this way the readers of the newspapers and mining and scientific journals were kept informed of the nature of the publications issued from time to time by the Survey.

The publications of the Geological Survey and of the National Museum of Canada are distributed by this division. During the year 58,775 publications, exclusive of the French editions, were distributed. Of these, 7,247 were sent to addresses on the regular mailing lists, and 51,528 were distributed in compliance with written and personal requests for named publications, or requests for general or specific information.

LIBRARY

Mrs. F. E. Forsey, Librarian, reports:

Additions to the Library during the year include:

Books purchased	485
Volumes received as gifts or exchanges	826
Pamphlets	631
Maps	394
Periodicals subscribed for	203
Periodicals received as exchanges	423

Seven hundred and ten volumes were bound, and 154 maps mounted on cotton. The catalogue was increased by 3,119 cards, not including those added to the map and lantern slide catalogues.

The work of keeping the files complete by requests, claims, and acknowledgments amounted to 701 pieces of correspondence. The regular correspondence, having to do largely with reference work, loans, and bibliography, involved the usual amount of translating from foreign languages. Translating of articles and letters for members of the staff of the Museum and Survey has also been done in the library.

In the operation of the library loan system, the library supplied reference material to the following institutions, as well as to individuals: Universities of British Columbia, Manitoba, Toronto, Queen's, Chicago; to the Agricultural Colleges in Winnipeg, Guelph, and Ste. Anne; the Normal School, London; Royal Ontario Museum, Toronto; laboratories in eight provinces; and to twenty Government departments in Ottawa. Books and periodicals have been borrowed from the following: Library of Parliament, Mines Branch, Forestry Service, Carnegie Library of Ottawa, McGill and Toronto Universities, the Library of Congress, United States Geological Survey Library, New York State Library, and the Library of the Gray Herbarium at Harvard.

The current year shows a marked increase also in the loaning of maps, lantern slides, and photographs from the library collections. To administer these collections adequately in accordance with modern museum methods, an enlarged library staff is urgently required. Additions to the staff have been recommended in recent years on account of the rapid development and expansion of the library proper. It would seem that the time has come to provide for these insistent needs.

A constant effort to complete series of important periodicals has resulted this year in securing several notable acquisitions, among them being thirteen volumes of the "Matériaux pour la carte géologique Suisse", and volumes 54-79 of Popular Science Monthly, filling the gap between the years 1899-1911, and completing the series. Our set of the Transactions of the Wisconsin Academy of Sciences, Arts, and Letters has been brought up to date by the Academy's gift of volumes 17-22, 1914-1926; and the four volumes necessary to complete our series of Handlingar of the Scandinavian Naturalists' Congresses have been presented by Mr. F. Johansen. Among the many institutions whose gifts are gratefully acknowledged, special mention should be made of the Carnegie Institution of Washington, which generously presents to us all of its publications pertinent to the activities of the Survey and Museum.

The library will shortly add to its equipment for scientific research the comprehensive "Card Index of New Genera, Species, and Varieties of American Plants", which is compiled and published by the Gray Herbarium of Harvard University. This unique and important index is regarded as the most valuable aid to botanical research on the continent, and henceforth it may be consulted by botanists throughout Canada, either in person or by correspondence, in the library of the Geological Survey.

BRITISH COLUMBIA OFFICE

V. Dolmage, Geologist in charge, reports:

During the year the office was moved from the Pacific building to rooms 509-513 Winch building, Vancouver. It was visited by 4,200 people interested in mining and metallurgical matters; 629 inquiries were answered by letter and a very large number by telephone; there were distributed by hand and by mail 2,000 memoirs and summaries and 2,075 maps; a large number of rock specimens were examined and reported on and seventeen lectures on subjects related to mining and geology were given by the staff, composed of V. Dolmage, F. A. Kerr, and A. J. C. Nettell.

A short account of the origin and purpose of this branch of the Survey was given in the annual report for last year.

NATIONAL MUSEUM OF CANADA

W. H. Collins, Acting Director

A brief outline of the history of the Museum was given in this report for last year, and a more extended account appears in the first annual report of the Museum, for 1926. These articles show how the Museum has originated from the Geological Survey of Canada and what are its present relations to the Survey, a knowledge of which is necessary for a proper understanding of the activities and needs of both institutions, but particularly of the Museum.

COLLECTIONS AND EXHIBITS

The collections of natural history specimens are large and rather good, owing to the fact that they have been accumulating since 1843 and that during most of this period of eighty-five years good material was more abundant than now. The display of these collections for the benefit of the public is not so well forward, because the Museum has been compelled to move three times since 1910, first from the old Survey quarters on Sussex street to the new Victoria Memorial Museum in 1910, then to various temporary quarters in 1915 when the Parliament buildings were burned, and again back to the Victoria Memorial Museum in 1920. Consequently, an abnormally large share of effort is now needed for the development of exhibits.

During the past year two rooms were constructed at the sides of the entrance hall for the benefit of visitors. That on the east side is used as an information bureau and for the display and distribution of books, picture postcards, and other Museum and Survey publications. The other houses a departmental telephone exchange, a telephone booth for public use, and a room for the Royal Canadian Mounted Police officers stationed in the building.

The staff of cabinetmakers and carpenters have continued construction of exhibition cases for display of minerals and ten of these were complete at the end of the year. A contract was let in January, 1928, to the Steel Equipment Company, of Ottawa, to build sixteen metal cases and it is expected that these will be in place before the end of 1928. Some additional cases have also been provided for special exhibits or for the enlargement of exhibition halls already organized.

NEED FOR ENLARGED QUARTERS

When the additional furnishings above mentioned are installed the exhibition halls will be practically full, but provision will have been made for less than half of the branches of natural history to which the Museum gives attention. This lack of space was discussed at some length in the first annual report of the Museum, for 1926. It was pointed out that the Victoria Memorial Museum building, originally intended as a home for the Geological Survey and Museum, is occupied also by the administrative part of the Department of Mines, the Dominion Fuel Board, and the National Art Gallery. In consequence, out of a total of twelve large exhibition halls and two smaller ones only four large halls and the two small ones are now available for Museum exhibits. Only in the case of anthropology and birds is it possible to develop permanent and comprehensive exhibits. Display of ores, minerals, mammals, plants, fossils, and other important features are being crowded into hallways and odd corners. Difficulty is also being experienced in finding office room for

the growing staff of the Survey. If the entire building were available for the Survey and Museum their staff and exhibition requirements would be nearly met, but there would not be sufficient room for storage of study collections and for work shops and laboratories. Wholly inadequate provision for these essentials to a scientific institution was made in planning the present building, and the only satisfactory solution appears to be an addition to the building.

Tentative consideration of this matter indicates that somewhat less than $1,000,000 would be required to enlarge the museum building to meet requirements for the next twenty years or so. This is a formidable sum of money, but against it are to be offset certain considerable annual economies which would result. The Division of Mineralogy, which now occupies separate quarters about a mile away, would be housed in the Victoria Memorial Museum and there would be a yearly saving of $10,000 to $12,000 for rent, heating, and other services. Also, there should be a saving of $3,000 to $5,000 a year in temporary construction in the Victoria Memorial Museum itself, necessitated by the present cramped conditions. Averaging this annual saving at $15,000, it represents the interest at 5 per cent on a capital investment of $300,000. Moreover, it must be remembered that a much larger investment has already been made towards a national museum and that the additional amount wanted would probably make just the difference between a well-equipped, efficient institution and one that can not make an adequate return for what has been invested in it. The Victoria Memorial Museum must also be considered an important feature in any scheme for the improvement and beautification of the capital city and be supported with a liberality in correspondence with that accorded to other improvements. A national museum is an expression of the interest of its country towards the cultural aspects of civilization and should hardly be, therefore, an object of close economy. Compared with such sister institutions as the United States National Museum, the American Museum of Natural History, Field Museum, or even the Royal Ontario Museum at Toronto, the expenditure upon the National Museum so far has been small. The building of the American Museum of Natural History has already cost $10,786,306.48 and extensions are planned which will enlarge it to about three times its present size.

There is only one thing of importance needed now in order to develop a national museum illustrative of the natural history, natural resources, and industrial products of the country that Canadians may regard with satisfaction —an addition of about 60 per cent to the present Victoria Memorial Museum building. It is a large requirement, but an essential one. It is quite apparent that the Government intended to support a national museum generously twenty years ago when the present building was built at the foot of Metcalfe street facing the Parliament buildings and it is to be hoped that this spacious policy will be continued. It will take two years or more to build an addition such as is needed, so it is hoped there will not be much delay.

DONATIONS

Interest in the Museum is shown frequently and in substantial manner by gifts of valuable material. This year a particularly valuable series of specimens of gold, platinum, palladium, and other rare metals obtained from the nickel-copper ore deposits of Sudbury district was presented by the Mond Nickel Company, and other fine material for the exhibit of nickel and its products was donated by the International Nickel Corporation and by Henry Wiggin and Company, of Birmingham, England. The section of the museum devoted to economic geology has been particularly favoured in recent years by gifts from the National Aniline and Chemical Company of Buffalo, the Imperial Oil Company, Mining Corporation of Canada, and other companies.

MUSEUM LECTURES

The Museum Lecture Committee, composed of H. I. Smith, M. E. Wilson, and C. L. Patch, reports that the course this year consisted of sixteen lectures, given by lecturers from twelve different technical institutions in the Government service. The course lasted from November 12, 1927, until March 14, 1928. Each lecture was delivered on a Saturday morning to children and on the following Wednesday evening to adults. The total attendance of children was 9,550 and of adults 2,312. Further details are given in the annual report of the Museum.

FIELD WORK

An account is given in the report of the Geological Survey, preceding, of investigations in geology, mineralogy, and palæontology. In addition, five field parties were engaged in anthropological work and four in biological work, short descriptions of which follow.

ANTHROPOLOGICAL DIVISION

D. Jenness, Chief of the Division, reports:

FIELD WORK

Five parties went out on field work during the summer.

D. Jenness visited Newfoundland to discover whether any traces remained of the extinct Beothuk Indians, and to investigate their relationship to the Indian and Eskimo tribes of Canada. Ever since their discovery by John Cabot, in 1497, mystery has attached to the Beothuk Indians of Newfoundland, who became extinct a century ago; they have stood by themselves, an isolated tribe that could not be definitely connected with any other Indian tribe in North America. Mr. Jenness' researches last summer seem to indicate that they formerly occupied a portion of Labrador peninsula contiguous to some early Eskimo tribes, and that they migrated to Newfoundland only a few centuries before Cabot's time.

C. M. Barbeau spent the summer on Nass and Skeena rivers, British Columbia, studying the northern branch of the Tsimshian group of Indians. In addition to his ethnological researches he made a special study of the native music in co-operation with Dr. Ernest Macmillan, of the Toronto Conservatory of Music.

H. I. Smith, archæologist, resumed his supervision of the work of preserving the totem-poles in Skeena River basin, British Columbia. He successfully restored eight totem-poles during the summer at Kitselas canyon, then moved to the vicinity of Prince Rupert to cast two petroglyphs and to supervise the partial excavation of a shell-heap.

W. J. Wintemberg conducted archæological researches first at Tadoussac, then westward along the north shore of St. Lawrence river as far as Three Rivers. His excavations at Tadoussac revealed evidence, not of an early Eskimo settlement, as had been reported previously, but of a somewhat peculiar Algonkian culture, either archaic or else a local variation.

J. C. Boileau Grant, Professor of Anatomy in the University of Manitoba, made an anthropometric study for the division of the Cree and Ojibwa Indians living on Island and Gods lakes, in northern Manitoba. Dr. Grant's field work was the first attempt to make a detailed anthropometric study of a Canadian Indian tribe. He examined over three hundred Indians at the two lakes he visited, and is now working up his notes and measurements into a full report.

OFFICE WORK

Scientific reports completed by the staff and handed in for publication during the past year were: "A Comparative Vocabulary of the Western Eskimo Dialects," by D. Jenness; "Materia Medica of the Bella Coola," by H. I. Smith; and "The Uren Village Site in Southeastern Ontario," by W. J. Wintemberg. Furthermore, two reports by former field workers were edited and submitted for publication: "Cree Tales," by Professor Leonard Bloomfield, and "The Bella Coola Indians of British Columbia," by Professor T. F. McIlwraith. Mr. Barbeau is completing his account of the totem-poles of Skeena river, British Columbia, and Mr. Wintemberg is preparing a report on the Roebuck village site in southeastern Ontario. Mr. Smith, having completed his "Materia Medica of the Bella Coola," is now arranging and titling a series of motion pictures that he has taken to illustrate the manners and customs of some Indian tribes in British Columbia.

The Division of Anthropology participated in several interesting events during the past year. It lent the services of Mr. Barbeau, and contributed French Canadian specimens, to the Canadian Folk Song and Handicraft Festival at Quebec, organized in May by the Canadian Pacific railway; in August it contributed a large collection of specimens to a festival at Joliette, Quebec, arranged by the Fathers of the Oblate Mission; it arranged a small exhibit for the meeting at Ottawa of the International Mining Congress in August; and it contributed most of the ethnological specimens for the Canadian West Coast Indian art exhibit shown at the National Gallery of Canada, Ottawa, in December, at the Art Gallery, Toronto, in January and February, and at the Art Association, Montreal, in February and March. It may be mentioned here, as indicating the standing which the division has attained in foreign countries, that Mr. Jenness was asked to lead a scientific expedition to Alaska during the summer on behalf of the National Geographic Society and the United States National Museum; the project was finally abandoned, however, through a disagreement between the two organizations concerning certain details in its arrangement.

MUSEUM WORK

The two exhibition halls assigned to the Division of Anthropology are undergoing extensive changes. The west hall, which is already filled with permanent cases, is being slowly reorganized; five of its cases were rearranged during the past year. The east hall, hitherto a medley of storage cabinets and small table cases, is to be equipped with large, glass-sided cases similar to those in the west hall, but with hinged doors that will make the specimens exhibited more accessible. These new cases are now undergoing assembly in the hall itself and will be installed and arranged during the coming year.

Accessions to Museum

The ethnological and archæological catalogues of the division show that its collections were augmented by about 800 specimens, but this total does not include a much larger number that are not yet catalogued. The majority of these specimens were obtained by members of the staff in the course of field work, but a certain number were donated, the North West Territories and Yukon Branch of the Department of the Interior being, as in former years, the chief contributor. The Canadian Pacific railway, through Mr. J. M. Gibbon, donated a motion picture reel depicting scenes among the Indians of the Pacific coast, and three other reels, illustrating the Nass River Indians, were presented by Dr. J. S. Watson, of Rochester, New York.

The division made two important exchanges of specimens during the course of the year. It exchanged a large collection of specimens from the Tsimshian Indians, B.C., with the National Museum of Denmark, Copenhagen, for a collection of Greenland specimens; and it exchanged with Lieut. G. T. Emmons, Princeton, New Jersey, some Vancouver Island wood-carvings for a collection of Tlinkit basket-making material. In addition, it made two donations: to the Royal Ontario Museum of Archæology, a collection of Eskimo specimens; and to Loyola College, Montreal, which is establishing a natural history museum, a collection from the British Columbia and Plains' Indians to serve as the nucleus of a Canadian ethnographical section in that college.

BIOLOGICAL DIVISION

R. M. Anderson, Chief of the Division, reports:

FIELD WORK

R. M. Anderson left Ottawa August 26 and was joined at Saskatoon by Dr. Seymour Hadwen, Chief of the Department of Veterinary Science in the University of Saskatchewan. They made an expedition through parts of the Wood Buffalo park near the boundary of Alberta and the North West Territories. With the assistance of the warden service of the Wood Buffalo park, they collected skins and complete skeletons of two large adult wood buffalo bulls, as well as black bear, beaver, and other smaller animals. Careful post-mortem examinations were made for external and internal parasites and signs of disease in all species, large and small, and blood slides were taken for future examination. Such co-operation by a distinguished parasitologist and expert in health of mammals, in field work with wild mammals, opens up great possibilities in a field comparatively unworked in this country, and if continued may lead to important discoveries in regard to the periodicity in numbers of various species of our fur-bearing and other wild mammals.

P. A. Taverner spent most of his time in office work, but did some local work in bird photography.

C. H. Young, and H. M. Laing, of Comox, began collecting small mammals in an intensive way about May 5 at Huntingdon, B.C., near the border of the state of Washington. They continued work at Sumas, Cultus lake, Lihumption park, Hope, Hope-Princeton summit pass, Stevenson creek, and Princeton. The primary object of the expedition was to make a complete collection of the mammals found in southern British Columbia near the International Boundary line. The southern part of British Columbia is much cut up by alternating mountain ranges and valleys, which show different climatic conditions and consequent varied fauna and flora, due to variations in humidity and altitude. A number of North American species reach their northern limits near this region, and there are probably several species and subspecies occurring in this region which have never been taken in Canada. Near Huntingdon they took a fine series of the large Townsend mole, or Oregon mole, which had never been recorded from Canada previously, as well as specimens of the spotted owl and California cuckoo, both of which have been taken very rarely within our limits. Fine series of other species not previously represented in our collections were also taken, mammals totalling 915, and birds 78. Mr. Young returned to Ottawa about the middle of September; Mr. Laing remained in the field until October 10.

J. D. Soper started from Ottawa May 23 and proceeded to Munson, Alberta. Beginning work at this place he proceeded southwest to Coleman, Alberta, and

worked eastward, keeping most of the time within 30 or 40 miles of the International Boundary line where roads would permit, in southern Alberta, Saskatchewan, and Manitoba as far east as Turtle mountains, Manitoba. He collected in the vicinity of Coleman, Burmis, Milk river north of Sweet Grass hills, Deer creek, Eagle Butte, and Lodge creek on the western edge of Cypress hills in southeastern Alberta; south and east of Cypress hills in Saskatchewan, collecting near Battle Creek, Fort Walsh, Eastend, Val Marie, Lonesome Butte, Big Muddy lake, McDonald lake, and Glen Ewen, Saskatchewan; junction of Antler and Souris rivers, and Max lake, Turtle mountains, Manitoba. He left Max lake on November 3 and proceeded to Prince Albert, Sask., going north from there about 60 miles to Harper lake and Birch Bark lake, where he collected a pair each of prairie elk, moose, and mule deer, as well as a number of smaller mammals, finishing this work December 15.

Joseph Rochon left Ottawa August 15, and collected at Ste. Veronique, Labelle county, Quebec, until September 15. He collected 118 small mammals, including a specimen of the least weasel, a species not previously recorded from the province of Quebec.

C. L. Patch, D. Blakely, and C. E. Johnson did some field work in Ottawa district, principally collecting local material to fill out the collections and obtaining accessories for habitat group work.

M. O. Malte early in the spring visited the New York Botanic Garden and the American Museum of Natural History, New York; the United States National Herbarium, Washington, D.C., and the Gray Herbarium, Harvard University, Cambridge, Mass., for studies of critical plant genera and methods of arranging botanical museum exhibits. On June 21, he left, with W. R. Watson, student assistant, for northwestern New Brunswick, making his headquarters at St. Leonard. On July 12 he left there for North Sydney, N.S., to join the Canadian Arctic Expedition of 1927, under direction of Mr. George P. Mackenzie, North West Territories and Yukon Branch, Department of the Interior, which sailed on July 16 on S.S. *Beothic* for Greenland and the principal islands in the eastern part of the Canadian Arctic archipelago. Botanical collections were made at twelve ports of call on Ellesmere island, Devon island, Somerset island, Baffin island, and the south shore of Hudson strait, yielding about 4,000 herbarium specimens of flowering plants and ferns. The expedition returned to North Sydney, N.S., September 5. During the absence of the chief botanist in the Arctic, Mr. Watson continued botanical explorations in northwestern New Brunswick until the last week of August. The collections from New Brunswick totalled about 3,000 herbarium specimens, containing about 550 species.

OFFICE WORK

The only official publication issued by the Biological Division during the year was "A Study of Buteo borealis, the Red-tailed Hawk, and its Varieties in Canada," by P. A. Taverner, Museum Bulletin No. 48.

A report on Marine Algæ, being Part B, Report of the Canadian Arctic Expedition, 1913-18, was issued November 24, 1927, by the Department, under the supervision of R. M. Anderson, general editor of reports of this expedition. It comprised sections on "Bering Sea and Arctic Ocean Algæ," by the late Frank Shipley Collins; "Calcareous Algæ," by Mme. Paul Lemoine; and "Hudson Bay Algæ," by Marshall A. Howe.

Completed manuscripts prepared for publication by officers of the division include: "A Faunal Investigation of Southern Baffin Island," by J. D. Soper, covering his work of 1923-26; "Commercial Bent Grasses of the Genus *Arctogrostis*," by M. O. Malte; "Birds of the Belvedere Region, Northern Alberta," by P. A. Taverner; "Birds and Mammals of the Mount Logan Expedition," by H. M. Laing.

R. M. Anderson made an extended study of the natural history literature of the eastern Arctic region and found that considerable valuable and interesting material had been generally overlooked and was unavailable to most students on account of not being printed in English. He prepared a paper for the Washington meeting of the American Ornithologists' Union, November 16, 1927, on "The Work of Bernhard Hantzsch in Arctic Ornithology," which was accepted for publication in *The Auk* in 1928. In connexion with the Baffin Island work, he prepared a translation of Hantzsch's "Beobachtungen über die Säugetiere von Baffinsland" ("Observations on the Mammals of Baffin Island"), *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin,* 1913, pages 141-160. With the assistance of Mrs. R. M. Anderson, there was also prepared for the library a translation of Dr. Erich Hesse's "Bernhard Hantzsch's ornithologische Ausbeute in Baffinland" ("Bernhard Hantzsch's Ornithological Results in Baffin Island"), *Journal für Ornithologie,* vol. 63, No. 2, 1915, pages 137-228; also "Beiträge zur Kenntnis der Vogelwelt des nordöstlichen Labradors" ("Contribution to the Knowledge of the Avifauna of Northeastern Labrador"), by Bernhard Hantzsch, *ibid.*, vol. 56, pages 177-202 and 307-393. The first part of the last-mentioned paper was published in *The Canadian Field-Naturalist*, Ottawa, vol. 42, Nos. 1 and 2, January and February, 1928, and the second, more technical part, will follow.

P. A. Taverner contributed an important paper to *The Auk*, vol. 44, No. 2, April, 1927, pages 217-228, entitled "Some Recent Canadian Records." In this paper he recorded a number of Canadian bird occurrences which have not been formerly recorded, as well as a few others which have been published in media that are not generally available for reference, the whole being to some extent supplementary to his "Birds of Eastern Canada," and "Birds of Western Canada." Other members of the staff have contributed brief notes and reviews to periodicals but no formal articles have been listed.

MUSEUM WORK

Some progress has been made in installing biological exhibits in the Museum halls. A few small bird habitat groups with accessories have been prepared, and a considerable number of individual bird specimens have been freshly mounted or remounted from old material to fill out the gaps in the systematic exhibit collection of birds. In some of the families and genera of birds, specimens of each species known to occur in Canada are exhibited in some form. It is intended ultimately to have all the more commonly observed or important species represented in the different adult and juvenile plumages of both sexes in the different seasons. A number of small mammals have been mounted singly, and a habitat group of black-tailed prairie-dogs, taken at Val Marie, in southwestern Saskatchewan, the first authentic Canadian specimens of this species, were installed. Extensive increase in the number of mounted specimens of large species can not be made with the space at our disposal.

As a result of field work by members of the staff, considerable additions have been made to the reserve study collections of both mammals and birds, and many specimens suitable for mounting have been acquired. A few particularly desirable specimens have been purchased. Many valuable specimens have been obtained by gift or transfer from other departments, notably from the Canadian National Parks Branch and the North West Territories and Yukon Branch, Department of the Interior, and from the Royal Canadian Mounted Police.

The Canadian National Parks Branch, through the Commissioner of Parks, Mr. J. B. Harkin, has kindly sent in many specimens of large game and pre-

datory and fur-bearing mammals which have died from natural causes, or have been killed by park wardens, as well as confiscated for illegal trapping in the various national parks, Waterton Lakes, Yoho, and Jasper. The North West Territories and Yukon Branch have sent in several skulls of timber wolves and Arctic wolves from the northern districts, principally from the Wood Buffalo park. The Commissioner of the Royal Canadian Mounted Police, Colonel Cortlandt Starnes, has showed continued interest in our work and has encouraged the police detachments in the north to send in material to the Museum. The most notable accession secured last year from the police was a series of three skins and skulls of the small white Arctic caribou, or Peary caribou, taken by Staff-Sergeant (now Inspector) A. H. Joy on Axel Heiberg island in the spring of 1927. We are also indebted to Dr. Morten P. Porsild, Director of the Danish Arctic Station, Disko, Greenland, for the gift of three fine heads of the Greenland caribou, brought down by the Canadian Arctic Expedition of 1927. Both of these species have long been desiderata in our mammal collections.

Considerable progress has been made in identifying and arranging the systematic collections, particularly in botany, mammalogy, ornithology, and herpetology, and a large amount of data has been assembled along these lines for use in reports and memoirs now in preparation, or necessary as a foundation for future publications. The determination of the large amount of new material coming in from new districts has involved considerable study on the part of the technical officers of the Biological Division.

Accessions to Museum

Plants received outside of collections made by staff:

Mr. H. Groh, Ottawa, Ontario	53
Gray Herbarium, Cambridge, Mass	229
National Museum, Stockholm, Sweden	10
Dr. Morten P. Porsild, Disko, Greenland	132
Dr. B. Lynge, Oslo, Norway	87
Mr. E. A. Moxley, Owen Sound, Ontario	47
Mr. E. M. Kindle, Ottawa, Ontario	69
Fr. Marie-Victorin, Montreal, Quebec	191
Mrs. George Black, Dawson, Yukon	31
Dr. E. H. Moss, Edmonton, Alberta	60
Miss E. S. Dowding, Edmonton, Alberta	2
Mr. Wm. Herriott, Galt, Ontario	5
Mr. H. Mousley, Montreal, Quebec	8
Total	924

Plants distributed:

Gray Herbarium, Cambridge, Mass	283
National Museum, Stockholm, Sweden	36
Fr. Marie-Victorin, Universite de Montreal	104
Dr. B. Lynge, Oslo, Norway	65
Scholasticate of the Oblates of Mary, Ottawa	224
Dr. Selim Birger, Stockholm, Sweden	100
Total	812

Accessions to the zoological collections:

Mammals received and catalogued	2,097
Birds received and catalogued	307
Reptiles and amphibians received and catalogued	287
Birds' eggs in sets, and nests	6
Birds' stomachs (in formalin), for investigation of contents, received and catalogued	25
Insects collected (mostly Microlepidoptera)	500

MINES BRANCH

John McLeish, Director

The organization of the Mines Branch continues substantially as revised in 1922, although the activities and amount of work undertaken in the major investigative divisions have been greatly extended. The expansion which the mining industry in Canada is now experiencing is reflected in the demand upon the Mines Branch for information concerning the industry, for test work on ore treatment, and for assistance in solving the many problems that continually arise in respect to the treatment of metallic ores, non-metalliferous minerals, and the manufacture of clay products. The public demands for information on the varied matters relating to fuels become more and more insistent, and the scientific study of fuels has become an industrial necessity. This is especially so in the matter of selecting, preparing, and cleaning coals for the market; of burning coal in its powdered form; of high- and low-temperature carbonization, and of the latest developments in coal liquefaction.

To meet these demands the activities of the Mines Branch are being extended as rapidly as appropriations permit, but insufficient housing accommodation for both laboratories and staff is proving a severe handicap.

Although no additional duties have been assigned to the Branch during the past year, several developments indicate important and interesting new lines of procedure. One of these is an agreement entered into with Base Metal Extraction Company, a British organization, under which the company built and equipped a laboratory in Ottawa on the departmental property for the experimental test and demonstration of a metallurgical process for treating complex zinc ores. An agreement was also made with the Cassel Cyanide Company under which the company is to maintain for two years a research fellowship in selective flotation, the appointee carrying on his investigations in the departmental laboratory under the direction of the Chief of the Ore Dressing Division.

A private attempt to develop a peat industry having failed apparently through lack of funds, the Government followed the recommendation of the Peat Committee, made in 1924, for the construction and operation of a small commercial plant according to plans recommended by the committee. An agreement was entered into with Peat Fuels, Limited, for the taking over of the old plant, its reconstruction, and operation. A complete plant has been built during the past year at Alfred, Ont. This plant will be operated on a commercial basis during the season of 1928.

Progress was made on the construction of a Fuel Research Laboratory in Ottawa. The new building will house the present staff of the Division of Fuels and Fuel Testing; provide better accommodation for the small-scale chemical work in solid fuels, oils, and gases; and new accommodation for large-scale investigations in respect to the cleaning, burning, and carbonizing of coal.

Many members of the staff contributed to the success of the Second Empire Mining and Metallurgical Congress which met in Canada during August and September. A large amount of literature on the mining and metallurgical industries of Canada was published for the Congress and representatives accompanied both main excursions, the one to northern and western Canada, and the other to northern and eastern Canada and Newfoundland.

CHANGES IN STAFF

Six permanent positions were vacated during the year by resignation: two of these were chemists; three, clerks; and one, laboratory helper; a seventh permanent position was made vacant by the death of Michael Bones, labourer.

Eleven vacant permanent positions were filled during the year by appointment under competition: of these four were engineers or chemists; four, laboratory assistants or helpers; and three, clerks or stenographers.

Thirty temporary appointments were made in Ottawa during the year, in addition to field assistants and labour at Alfred in connexion with the construction of the peat plant. These included two engineers, nine student assistants and laboratory helpers, ten clerks and stenographers, one mechanic, and eight labourers. The services of nine temporary employees, including four clerks, four student assistants, and one labourer, were discontinued during the year.

The positions of seven technical officers and one laboratory assistant were improved during the year by promotion or reclassification.

The construction of the peat plant at Alfred required the services of 25 men for varying periods of time.

On the organization of the Mines Branch in 1907, the staff comprised 21 persons, of whom 13 were technical officers including administrative officers, engineers, chemists, and assayers.

In 1920 the staff had increased to 98, of whom 35 were technologists including engineers, chemists, and assayers; 22 clerks, and 41 mechanics, labourers, laboratory assistants, messengers, etc.

In 1928 at the end of March, the number employed was 151, including: 56 administrative officers, engineers, chemists, and assayers; 12 technical clerks and draughtsmen; 22 clerks and stenographers; 18 laboratory assistants, in several grades; and 43 mechanics, labourers, messengers, etc.

MINERAL RESOURCES DIVISION

The Chief of the Mineral Resources Division, A. W. G. Wilson, spent about three months on field service in various parts of Canada during the season of 1927. Short trips were made to points in southern Ontario, where new work was in progress on old prospects, in continuation of the search for sources of rare minerals containing rare chemical elements, especially zirconium, caesium, and rare earths. A reconnaissance trip was made in company with M. F. Goudge, departmental specialist on limestones, to Prince Edward Island, and afterwards to cap d'Or, N.S. At the latter point a quantity of zeolites were collected for use in some experimental work in the absorption of rare gases required in the manufacture of vacuum tubes and special lights and beacons. Part of August and all of September were devoted to attendance at the Second Empire Mining and Metallurgical Congress, including the western excursion, for the purpose of imparting information concerning Canada's mineral resources, their development and utilization. Towards the end of the year a week was spent in visiting the plants of the Aluminum Company of Canada at Arvida, Shawinigan Falls, and Toronto; a number of other plants in the vicinity of Toronto and Hamilton, where aluminium products are fabricated, were also visited in prosecution of a general study of the development of this industry in Canada. The services of this officer were, on several occasions, requisitioned by the Advisory Board on Tariff and Taxation in connexion with technical matters relating to several of the reference hearings.

H. S. Spence was engaged during the season in resurveying the feldspar and mica industries, and industries utilizing these products. The data assembled will be embodied in reports shortly to be issued, designed to show the present

status of these industries, and to supplement the information contained in monographs on these minerals published some years ago.[1] During the course of field work Mr. Spence secured a special consignment of graphite ore for the purpose of initiating an investigation into the possibilities of producing a flake graphite suitable for the manufacture of graphite crucibles. Mr. Spence attended the Second Empire Mining and Metallurgical Congress as a departmental representative, and he accompanied the Congress on its western tour to British Columbia and return to Quebec and Thetford Mines.

L. H. Cole was engaged during the field season in resurveying the gypsum and salt industries of Canada. The latter part of July and the first part of August were spent in examining and sampling gypsum deposits in Nova Scotia and New Brunswick. A visit was paid to the salt mine at Malagash. Again, during the month of October and the first half of November additional gypsum deposits in Cape Breton, in the vicinity of Antigonish, and in Hants county, Nova Scotia, were examined and sampled. The samples obtained are large commercial samples and are to be used in laboratory research work. Mr. Cole also secured samples from a number of salt springs not previously examined. The most important result of the field work is the discovery of the occurrence of potash salts in well borings from an exploratory well at Gautreau, in the valley of Petitcodiac river, New Brunswick. These borings were placed at the disposal of the Department for examination through the courtesy of Dr. J. A. L. Henderson, Managing Director of the Maritime Oil and Gas Company, Limited. Mr. Cole attended the Second Empire Mining and Metallurgical Congress as a departmental representative, and he accompanied the Congress on its western trip to British Columbia and return via Quebec and Thetford Mines.

S. C. Ells continued his work on the bituminous sands of northern Alberta, leaving Ottawa on May 8, and returning on October 15. The work of the season constitutes a logical sequence in the program planned some years ago when the first study of the bituminous sands was initiated by the Mines Branch, and included drilling and demonstration paving. In a preliminary report on the bituminous sands, issued by the Mines Branch in 1914, it was indicated that only after detailed exploration by means of adequate equipment can the true value of any portion of the bituminous sand area be determined. Subsequent investigation has amply confirmed this contention. It has, therefore, appeared desirable to attempt to develop efficient drilling equipment which will not only pass through heavy overburden but will also recover accurate core samples of the bituminous sand itself. During 1927, three wells were commenced and carried to the desired depth. As a result, it is realized that the most efficient type of drilling equipment has not yet been developed. It is, however, considered that results already achieved will prove of practical value to any who may contemplate extensive core sampling of these sands. For many years, natural rock asphalts, including bituminous sand, bituminous sandstone, and bituminous limestone, have been used in the United States for paving purposes. The record of early development of rock asphalt paving was, however, marred by many failures. Such failures not only entailed the loss of large sums of money, but, for a time, seriously prejudiced the public against the use of the natural material. Failure was due to various causes which are now well recognized. Among these were lack of uniformity in the materials quarried and shipped, and carelessness or lack of skill in subsequent manipulation. It appeared desirable, therefore, to undertake a limited amount of demonstration paving. During parts of 1926 and 1927, upwards of 35,000 square yards of wearing surface were laid at Jasper, Alberta. This work involved selection of an area from

[1] Spence, H. S.: "Feldspar."
Spence, H. S.: "Mica."

which suitable bituminous sand could be secured; opening up of a quarry with mining and shipping of the required tonnage of bituminous sand; designing and operating a commercial mixing plant suitable for the manipulation of bituminous sand; and laying the mixture in place. The first three divisions of this work were undertaken by the Mines Branch; the last was done by the Parks Branch. Wearing surfaces laid at Jasper included approximately 12,100 linear feet of motor highway, 3,200 square yards of garage drives and parking space, and 2,100 square yards of walks within Jasper Lodge grounds.[1]

M. F. Goudge continued the systematic survey of the limestone resources of Canada, which has now been in progress for three years. Six months were spent on field work, chiefly in eastern Canada, where practically all the field work in this investigation has now been completed. Early in the season a number of modern lime plants in the eastern United States were visited to study the latest developments in the lime industry in that country. Mr. Goudge's services were loaned to the executive of the Second Empire Mining and Metallurgical Congress as assistant to the train secretary in charge of the eastern excursion to the Maritime Provinces and Newfoundland.

A. H. A. Robinson is engaged primarily in the compilation of a report on "Lode Mining for Gold Ores in Canada." About three months were spent in the field during the past season; during July and part of August mining camps in British Columbia, including Anyox, Stewart, Britannia, Allenby, Trail, Nelson, and Kimberley were visited and current activities and outlook noted; short visits were paid to other localities in western Canada to discuss with local government and university officials current developments in the mineral industries in the western provinces. Mr. Robinson joined the eastern excurion of the Second Empire Mining and Metallurgical Congress on August 24, and accompanied the party to Newfoundland. Leaving the party on its return to North Sydney, on September 17, the following two weeks were spent in visiting localities in Nova Scotia where gold mining or prospecting were in progress.

V. L. Eardley-Wilmot has been engaged in compiling a report on "Artificial Abrasives," which constitutes one of the parts of his monograph on "Abrasives and Their Uses."[2] His next assignment is the preparation of a monograph on "Silver Mining in Canada." About two months were spent on field work in preliminary studies incidental to the compilation of this report, visits being paid to Cobalt, South Lorrain, and Gowganda. Mr. Wilmot was also assigned as a departmental representative on the eastern trip of the Second Empire Mining and Metallurgical Congress. While on this trip he examined additional diatomite deposits in Nova Scotia and Newfoundland. Before returning to Montreal he spent several days inspecting the diatomite deposit at Digby neck, Nova Scotia, and in discussing details of proposed future operations with the owners.

Arthur Buisson, mineral technologist in charge of the records section of this division, spent two months in the principal mining centres of southern British Columbia; and he also made brief visits to Winnipeg and to Sudbury area. At the end of the season about ten days were spent in Rouyn area of western Quebec. These inspection trips are made annually to secure first-hand knowledge of current developments and local conditions in the various mining camps visited. Mr. Buisson especially remarks on the optimism regarding the mining industry which prevails in both western and eastern Canada. He notes also the introduction of many modern improvements, and the remodelling of concentrators, which is contributing to the present healthy condition of the industry. Mr. Buisson joined the Second Empire Mining and Metallurgical Congress at Vancouver, and returned with the party to Montreal before proceeding to Rouyn area in continuation of his field work.

[1] A report on this work is now in press.

[2] Mines Branch repts., Nos. 673, 675, and 677.

C. H. Freeman and Eric H. Wait, junior engineers attached to the records section of the Mineral Resources Division, were assigned as field assistants to H. S. Spence and L. H. Cole during the field season. E. H. Wait was loaned to the Second Empire Mining and Metallurgical Congress to act as assistant train secretary for the eastern excursion; Mr. Freeman was retained in the office at Ottawa while other members of the technical staff were absent during the period of the Congress meetings.

J. M. Casey, statistician for the Mines Branch, devoted more than six months to conducting a survey of fuels used for domestic purposes in Ontario and Quebec during 1926. In connexion with this survey about two months were spent in field work in the various cities and towns of these provinces. An inquiry was also conducted respecting bunker coal consumption along the Great Lakes and St. Lawrence river. During the year a number of statistical investigations of old records of mineral production were made for the Dominion Bureau of Statistics, the Ontario Bureau of Mines, or for the use of officers of the Department of Mines.

ORE DRESSING AND METALLURGICAL DIVISION

W. B. Timm, Chief of the Division, reports that the applications for experimental test and research work on ore treatment have steadily increased with the greater activity in the mining industry. The laboratory work of the division, especially on the flotation of base metal sulphide ores is becoming more widely known among mining operators. Their keen appreciation of this work has resulted in the laboratories being taxed to their limit. The amount of work performed was fully 50 per cent greater than in the previous year, with a considerably larger amount in progress and waiting to be undertaken at the end of the year. The division has reached a point where in order to meet the demands of the industry more laboratory space is urgently required.

The permanent staff was increased during the year by the appointment of A. K. Anderson, grade III engineer; by the transfer of J. D. Johnston, junior chemist, from the Fuel Testing Division; by the appointment of H. L. Beer, junior chemist; and W. F. White and A. E. Larochelle, laboratory assistants.

Co-operative arrangements were entered into with the Base Metal Extraction Company, Limited, and the Cassel Cyanide Company of Canada, Limited. The Base Metal Extraction Company built and equipped a laboratory for experimental test and demonstration of a hydro-metallurgical process developed in England, for the treatment of bulk concentrates from mixed base metal sulphide ores. The Mines Branch conducted the concentration and roasting tests, the company the leaching, electrolytic, and other tests for the production of the metals. The Cassel Cyanide Company placed in the laboratories under Mines Branch direction and supervision a research fellow on the use of cyanide for the selective flotation of base metal sulphide ores, especially those containing copper and zinc minerals.

W. B. Timm spent three months in the field securing information on the progress made in ore dressing and metallurgical practice. C. S. Parsons, J. S. Godard, and H. C. Mabee accompanied the Empire Mining Congress on their tour of Canada; C. S. Parsons the eastern tour, J. S. Godard the western, and H. C. Mabee part of the eastern. C. S. Parsons and J. S. Godard spent three weeks in the field at Kirkland Lake, Ontario, demonstrating the feasibility of the flotation of cyanide tailings in the milling plants. C. S. Parsons and R. K. Carnochan spent a week visiting the iron ore concentrator at Lyon, and the talc and garnet plants in northern New York state. R. J. Traill visited the

non-ferrous smelting and refining plants of the northwest, including Trail, Tacoma, Kellogg, Anaconda, and Great Falls, and also of the Atlantic seaboard, securing information on the progress made in hydro-metallurgical and electro-chemical practice. He also visited Minneapolis to obtain the latest information on the test work being conducted on the direct reduction of iron ores at the Minnesota School of Mines.

LABORATORY INVESTIGATIONS IN ORE DRESSING AND METALLURGY

C. S. Parsons, A. K. Anderson, and J. S. Godard conducted the investigations on the treatment of metallic ores as follows:

The gold ore of the Sylvanite mine, Kirkland Lake, Ont.
The gold ore of the Blue Quartz mine, Painkiller lake, Ont.
The lead-zinc-gold of the Yankee Girl mine, Ymir, B.C.
The lead-zinc-silver ore of the Planet mine, Nicola, B.C.
The copper-zinc ore of the Amulet mine, Rouyn, Que.
The gold ore of the Francoeur mine, Boischatel, Que.
The gold ore of the Cooper mine, Michipicoten, Ont.
The gold-silver ore of the Premier mine, Premier, B.C.
The copper-zinc ore of the Sherritt-Gordon mine, Manitoba.
The gold ore of the Kirkland-Premier mine, Kirkland Lake, Ont.
The cyanide tailings of the Wright-Hargreaves mine, Kirkland Lake, Ont.
The cyanide tailings of the Kirkland Lake mine, Kirkland Lake, Ont.
The copper-gold ore of the Archean mine, Clericy, Que.
The lead-zinc ore of the Stirling mine, Cape Breton, N.S.
The gold ore of the Reno mine, Ymir, B.C.
The silver ore of the Toric mine, Alice Arm, B.C.
The lead ore of the Confederation Group, Cambourne, B.C.

R. K. Carnochan and R. A. Rogers conducted the investigations on the preparation of non-metallic minerals, as follows:

Calcite tailing from the Kingdon mine, Galetta, Ont.
Silica sands from Silico Limited, Montreal, Que.
Garnet rock from Langlade Garnet Syndicate, Langlade, Que.
The drying of epsom salts.
Graphite tailings from Dominion mine, Buckingham, Que.
Asbestos rock from the Nicolet mine, Danville, Que.
Sandstone from the Canada Glass Products, Limited, East Templeton, Que.
Gypsum from the Manitoba Gypsum Company, Falkland, B.C.
Quartz pebbles from Cypress hills, Alberta.
Silica sands from Black island, lake Winnipeg, Man.
Diatomite from lake Michel, Chertsey, Que.
China clay from Huberdeau, Que.

During the year there was undertaken an investigation on the concentration of Canadian graphite ores for the production of crucible flake and a comparison of Canadian, United States, Madagascar, and Ceylon flake for the manufacture of crucibles.

R. J. Traill, W. R. McClelland, and J. D. Johnston conducted the following investigations:

The application of a modified Eustis process to the treatment of high iron-copper concentrates for the recovery of the copper and precious metal values, and of the iron as electrolytic iron, and the sulphur content as elemental sulphur.

The metallization of the iron content in ilmenite ores for the purpose of determining operating conditions and data as a guide to proposed commercial plant installation and the production of a quantity of metallized material for further investigation by private enterprise on the production of titanium pigments.

H. C. Mabee, chief chemist in charge of the chemical laboratories of the division, reports that approximately 7,000 determinations were made on 1,684 samples of ores and products of test operations. B. P. Coyne, R. A. Rogers, and H. L. Beer performed the analytical, and L. Lutes the assay, work. Some preliminary work was done on the Eckel process for the production of iron slag cement, and on a hydrometallurgical process for the treatment of stibnite ore for the recovery of metallic antimony.

FUELS AND FUEL TESTING DIVISION

B. F. Haanel, Chief of the Division, reports increased activity in investigational and routine work. The chemical staff was increased by the appointment of E. J. Burrough as engineer, grade II. G. P. Connell continued on loan as junior chemist from the Chemical Division, and R. J. Offord was appointed to the junior chemist vacancy resulting from the resignation of A. F. Gill. Temporary appointments during the year were: C. J. Coleman, E. G. O. Way, and H. T. Fortune, all as laboratory helpers.

In addition to planning and directing the work of the division, Mr. Haanel attended the regular meetings of the Dominion Fuel Board. He was largely occupied with construction and equipment details in connexion with the new fuel research station as well as with the erection and tryout of the peat plant at Alfred. He visited the coke plant of Hamilton By-Products Limited in that city. During the year he prepared several reports on low-temperature carbonization, coal liquefaction, and other processes for the treatment of coals, among which was the N-T-U process for distilling oil-shales. A plant for distilling oil-shales according to this process was operated in California, but owing to a drop in crude oil prices it was temporarily closed down. Mr. Haanel also prepared a paper entitled "The Bearing of High and Low Temperature Carbonization, and Synthetic Fuel Processes, on Canada's Fuel Problems" for presentation at the World Fuel Conference to be held in London, England, during September, 1928. He also attended the opening meetings of the Empire Mining and Metallurgical Congress held in Montreal, in August, 1927; the annual meeting of the Engineering Institute of Canada held in Montreal, February, 1928; and the annual meeting of the Canadian Institute of Mining and Metallurgy held in Quebec city during March of the same year.

E. S. Malloch and C. E. Baltzer completed the full report on the tests of various fuels made in a domestic hot water boiler. During the month of May work was commenced on the Fuel Power Survey for the province of Ontario, with particular reference to the district of the city of Peterborough. This work was completed and fully reported on at the end of the fiscal year.

A. W. Mantle, mechanical superintendent attached to the Division of Fuels and Fuel Testing, reports increased activity in the mechanical section. The construction and installation of, and repair to, apparatus, machinery, etc., involved a total expenditure, for labour and materials, of over $23,000.

Under the direction of the chief engineer and the immediate supervision of R. E. Gilmore, superintendent of the fuel testing laboratories, the investigational work was conducted under four sections, viz.:

(A) Coal carbonization and briquetting, engineer, R. A. Strong;
(B) Oil-shale and bituminous sands, engineer, A. A. Swinnerton;
(C) Oils and gases, engineer, P. V. Rosewarne;
(D) Chemical laboratory (solid fuels), chemist, J. H. H. Nicolls.

Mr. Gilmore spent some time in connexion with the new laboratories, the selection of carbonization equipment for which took him and Mr. Strong on an extensive trip to coal experiment stations in Pennsylvania, Ohio, and Illinois. He assisted in the preparation of the annual report on fuels and fuel testing, and did considerable work in the matter of the classification of coals. As representative of the Department of Mines he attended two meetings of the A.E.S.C. Sectional Committee on coal classification.

J. H. H. Nicolls, besides looking after the routine analyses of solid fuels, conducted experiments on the caking index of Canadian bituminous coals. With the assistance of J. L. Bowlby, he carried out a large number of tests for the purpose of comparing methods of analysing coal and other solid fuels, as a pre-

liminary to the publication of the "Standard Methods of Analysis as used in the Fuel Testing Laboratories", and also continued his study of the application of different schemes for classifying Canadian coals according to the chemical and physical characteristics.

P. V. Rosewarne, assisted by R. J. Offord, conducted the fifth annual gasoline survey, consisting of 83 samples from 13 widely separated Canadian cities, and made a further study of the feasibility of reclaiming of used automobile crankcase oils. In addition to attending to the analytical work pertaining to samples of liquid fuels coming in from other Government departments, commercial firms, and private individuals, Mr. Rosewarne prepared for publication a set of standard methods for analysing lubricating oils. He represented the division at the Detroit meeting of the American Chemical Society, and at the Petroleum Congress at Tulsa, Okla.

R. A. Strong paid special attention to coal carbonization and briquetting problems. The results of tests that were made in the by-product ovens of the Winnipeg Electric Company were quite promising, for it was shown that certain Canadian coals from the Crowsnest area will produce as good coke as that obtained from the imported coal now used. Mr. Strong, with the assistance of E. J. Burrough, also conducted a series of high temperature carbonization tests on Canadian coals in the new (Koppers) laboratory electric tube furnace for the purpose of determining the yield and quality of the tar and gas by-products. The results of these tests will be published in the "Investigations of Fuels and Fuel Testing for 1927".

A. A. Swinnerton studied processes pertaining to the heat treatment of oil-shales and bituminous sands. He made a field investigation in the Maritime Provinces, conducted retorting tests on oil-shales from New Brunswick, and with the assistance of G. P. Connell made a further study of the alterations of the bitumen from Alberta bituminous sands.

Chemical Laboratory Work

During the year, a total of 850 samples of solid, liquid, and gaseous fuels were examined. Of these, 470, approximately 55 per cent of the total, were sent in from other divisions of the Mines Branch, from the Geological Survey, from other Government departments, from public institutions, commercial firms, and private individuals. The remaining 45 per cent pertained to investigations conducted by the technical staff of the division. Of the total samples submitted from outside the division, 146 were from other divisions of the Mines Branch, mainly from the Mineral Resources Division, 27 from the Geological Survey, 94 from the Department of Soldiers' Civil Re-establishment, 78 from other Government departments, and 125 from public institutions, commercial firms, and private individuals.

The following is a classification of the samples analysed according to standard laboratory methods by Messrs. C. B. Mohr, assistant chemist; G. P. Connell and R. J. Offord, junior chemists; G. E. LeWorthy, senior laboratory assistant; G. Connolly and W. Kritsch, laboratory assistants; and K. W. Bowles, C. J. Coleman, E. G. O. Way, and H. T. Fortune, laboratory helpers.

Solid fuels; total samples examined		381
Coals (various kinds)	328	
Cokes and chars	39	
Peat and miscellaneous	14	
Liquid fuels; total samples examined		290
Gasoline	106	
Lubricating oils	122	
Other petroleum oils and miscellaneous	62	
Gases from coals, oil-shales, etc		31
Bituminous sands and oil-shales		148

CERAMICS AND ROAD MATERIALS DIVISION

Howells Fréchette, Chief of the Division, reports increased activity in the division and much progress in the investigations under way. In some lines of investigation particularly gratifying results have been obtained.

J. F. McMahon, ceramic engineer, was appointed to the permanent staff as engineer, grade II, July 14, 1927.

J. G. Phillips, ceramic engineer, was appointed to the temporary list as engineer, grade II, August 19, 1927, and was retained as such throughout the balance of the fiscal year.

The growing volume of laboratory work necessitated additional laboratory assistance during the latter part of the year. Laboratory helpers were employed for nine months and one labourer for four months.

CERAMICS

At the request of the Mining Bureau of the Winnipeg Board of Trade, in July Mr. Fréchette was sent to Manitoba to study the difficulties being encountered in the attempts to produce high-grade face-brick within the province. Visits were made to the various plants and the nature of their problems was ascertained. As a result of advice given, considerable improvement in the ware was attained at one plant to the west of Winnipeg, but the problem confronting the operators at Winnipeg was found to be much more serious. At Winnipeg two clays are available for brickmaking. A shallow surface clay which burns to a very light buff has been used for many years in the manufacture of common brick. The supply of this clay is being rapidly depleted, and the cost of winning and transporting it to the brick plants is becoming a very serious item. Underlying this surface clay is a thick bed of red burning clay which, were it not for one very serious fault, would produce good face-brick. This is a tender-drying clay of the type known as gumbo. When moulded into bricks it is almost impossible to dry them without cracking. At one of the Winnipeg plants, face-brick is being manufactured from this underclay mixed with a silty clay obtained about 100 miles west of Winnipeg. The cost of transportation is high and the results are not very satisfactory. The manufacturers, the Alsip Brick, Tile, and Lumber Company, Limited, are anxious for a means of overcoming the drying difficulties, which will permit them to use the local underclay alone. On Mr. Fréchette's recommendation, the Department undertook the problem, and appointed Mr. Phillips to assist in an exhaustive research on this clay to determine means of processing it so as to overcome the cracking in drying. Coincident with the request for aid from Winnipeg, the Redcliff Brick and Coal Company, Limited, of Redcliff, Alberta, asked the assistance of the Department in overcoming the difficulty of drying their brick rapidly without excessive breakage. This problem, being the same as that of the Winnipeg brick manufacturers, was included in the research. A very comprehensive study of possible means for solving the problem has been made and a large amount of experimental work done on the clays from Winnipeg and Redcliff. As a result of this laboratory work, two methods of overcoming the drying faults of these clays were developed which may be expected to give good results and at a sufficiently low cost to be economic. It is proposed to conduct large-scale tests at a brick plant for the purpose of obtaining cost data and to establish definitely the applicability of the processes to mass production. The successful solution of this problem will mean much to the brick industry throughout the Prairie Provinces, for almost all the brick clays of that section of the country possess the fault of being tender-drying to an extreme degree. By rendering the clay fit for rapid drying, the brick plant capacities may be easily increased and the quality of the ware greatly improved.

In August Mr. Fréchette made a reconnaissance of the clay and shale deposits of Prince Edward Island, preliminary to a detailed study of these resources which is planned for 1928.

In September he visited the Grand Lake coal area in New Brunswick where he studied the possibilities for the establishment of clay working industries to utilize the large tonnage of shales mined incidental to the production of coal. Representative samples were taken for laboratory study. These have been subjected to thorough tests by Mr. McMahon, to determine their suitability for the manufacturing of ceramic wares.

During the summer, Mr. McMahon made a study of the excavation and transportation of clays at thirty brick and tile plants in Ontario. Information as to the cost of the various operations was secured and much general data gathered which will serve in determining the most economic methods of operation under specific conditions.

Grey face-brick is in fairly strong demand in Ontario and Quebec, and the market is being supplied from foreign sources as the local manufacturers have been unable to produce them. Several manufacturers have asked that a method of production be worked out for their clays. Mr. Collin now has this problem under way. It is usual to produce this grade of brick from a low-grade fire-clay, into which is mixed a small percentage of manganese dioxide. The low refractoriness of Canadian brick clays constitutes the main difficulty, as they cannot be burned to a sufficiently high temperature to produce the reaction which seems to be necessary between the manganese and the clay to develop the grey colour.

Much progress was made by Mr. Collin on the investigation of ceramic bodies for electrical heating devices. More than 4,000 test pieces were burned to various temperatures. Impact tests were made on about half that number of test pieces to determine their toughness. The percentage of shrinkage and water absorption was determined on each set of test pieces. A number of plants manufacturing this type of ware were visited and samples of the mixture used were obtained at three of them. Test pieces have been made from these and will be used to determine the relative value of the bodies compounded in the laboratory and the commercial bodies now being manufactured.

During the year 133 samples of clays and shales were tested. Tests were also made on one sample of mineral pigment, four samples of limestone, three samples of marl, three samples of pyrophyllite, and four samples of talc.

Transverse strength was determined on three samples of building brick.

A series of tests was made for a manufacturer desirous of producing dry-press brick from a clay previously used for another type of brick.

Tests were run to determine whether spraying would be more advantageous than dipping in the manufacture of glazed brick.

Experiments were made on the production of buff brick from a red-burning clay.

Four samples of fire-brick were tested and reported on for Government departments.

Numerous refractory shapes were made for use in the ceramic laboratory and for other laboratories of the Department.

The facilities of the laboratories and the assistance of the staff were, on several occasions, placed at the disposal of other departments for special tests.

In co-operation with the Research Council of Canada, an exhaustive laboratory investigation of the suitability of the magnesite from Grenville township, Quebec, for the manufacture of high-grade refractory brick, has been under way during the entire year. This work was conducted at first by Mr. R. T. Watkins, and later by Mr. J. W. Craig, ceramic engineers, and the results so far obtained show good prospects of success.

ROAD MATERIALS

During the early part of the field season, R. H. Picher, road materials engineer, visited thirteen stone quarries in the province of Quebec in districts not previously covered, and eight samples were collected for testing. Most of these quarries are not worked for the production of road metal, but have a large amount of waste rock which constitutes an important and easily available source of supply for road material and concrete aggregate.

Mr. Picher began a detailed investigation of the road material resources of Prince Edward Island.

The laboratory work consisted in testing the samples collected during the field season and also in conducting an investigation on cement mortars with various types of stone aggregates.

CHEMISTRY DIVISION

F. G. Wait, Chief of Division, reports:

From April 1, 1927, to March 31, 1928, twelve hundred and seventy-eight specimens have been reported on.

The work of the different members of the chemical staff has been as follows:

H. A. Leverin during the summer investigated the rate of drying of peat under the climatic conditions prevailing at Alfred, Ontario. He made numerous chemical analyses of a wide variety of materials, including abrasives, gypsums, silica sands, rock salt, brine, and alloys. He has also made several mineral identifications.

E. A. Thompson made chemical analyses and microscopic examinations, with photomicrographs, of two telluride ores for the Ore Dressing Division, and of sand from the Alberta bituminous sands. A metallographic examination and analysis was made of a piston from an airplane engine for the R.C.A.F. Complete analyses were made of seven samples of mineral water, of nineteen feldspars, and two micas, as well as a number of partial analyses and mineral identifications.

A. Sadler had charge of the furnace assays. He examined five samples of earths as to their suitability for use as fullers' earth, and determined the dehydration point and the behaviour on heating of six diatomites. He made complete analyses of eight rocks and minerals, and partial analyses of a large number of specimens.

James Moran's principal work has been the analysis of the air sampled in the coal mines of western Canada. Two hundred and fifty-two such samples have been analysed and reported on. He made partial analyses of a large number of limestones, assisted in the identification of minerals, and made tests of two rocks for radio activity.

C. L. O'Brian was engaged in the analysis of limestones and dolomites collected by the Mineral Resources Division.

R. J. Offord, prior to his promotion and transfer to the Fuel Testing Division on August 23, 1927, made 144 furnace assays for gold and silver, tested two specimens for radio activity, and made partial analyses of several limestones.

James Rivington, appointed senior laboratory assistant in November, 1927, working under direction and supervision of Mr. Sadler, made a large number of furnace assays. He assisted in the preparation of stock, volumetric solutions, and in the general work of the laboratory.

DOMINION OF CANADA ASSAY OFFICE, VANCOUVER, B.C.

The report of the Assay Office for the calendar year ending December 31, 1927, shows a decrease of business as compared with that of the previous year.

The net value of gold bullion deposited during the year was $1,750,599.35, being a decrease of $773,738.23 as compared with the year 1926. This is due chiefly to a lower production of bullion by a few of the principal shippers to this office and a fall in the value of placer gold production in British Columbia during the year. There is, however, every indication of a betterment during 1928; it is expected that the large gold dredge which operated throughout 1926 at Antler creek, Cariboo district, B.C., and which was being moved during the whole of last season to its new location at Cunningham pass, will be producing again in the late spring. Developments in other parts of the Cariboo and in Lillooet district also promise to further augment the gold yield during the coming season as compared with the year just closed.

GOLD BULLION

The following is a statement of gold bullion deposits at this office from the opening of the institution in July, 1901, to the close of business on December 31, 1927:

Number of deposits	28,324
Troy ounces	2,914,729·90
Net value	$46,260,262.99

The purchase and disposal of the gold bullion deposited during the year 1927 required a total of 1,645 meltings and 1,645 assays, quadruplicate assays being made in each instance, including the melting into large bars of the smaller deposits after purchase, and the assaying of same before shipment.

The aggregate weight of all deposits before melting was 108,080·89 troy ounces, and after melting 102,224·55 troy ounces, included in which were 59 deposits containing a large proportion of lead requiring to be cupelled in a large muffle furnace. The total weight of these deposits before melting was 11,689·19 troy ounces and after melting and cupelling 7,642·76 troy ounces, showing a loss by melting and cupellation of 34·617 per cent.

The average loss of melting all other bullion deposited, viz.: 96,391·70 troy ounces before melting and 94,581·79 troy ounces after melting, was 1·878 per cent.

The loss in weight by assaying (base and parted silver) was 31·62 troy ounces, making the weight of bullion after melting and assaying 102,192·93 troy ounces, the average fineness of same being 827¼ gold and 135½ silver.

The net value of the gold and silver contained in deposits was $1,750,599.35 and was received from the following sources:

—	Number of deposits	Before melting and assaying	After melting and assaying	Net value
		Troy ozs.	Troy ozs.	$ cts.
Bars, Nuggets, Dust, Amalgam, etc.—				
British Columbia	459	60,882·71	56,317·85	1,044,755 11
Yukon territory	405	39,436·44	38,852·50	649,502 72
Alaska	4	23·29	22·39	344 91
Dental and Jewellery Scrap—				
British Columbia	521	6,136·71	5,602·68	40,588 96
Alberta	111	744·43	644·50	6,294 11
Saskatchewan	52	450·17	352·67	4,593 69
Manitoba	2	193·96	187·41	569 89
Unclassified	1	213·18	212·93	3,949 96
	1,555	108,080·89	102,192·93	1,750,599 35

DRAUGHTING DIVISION

H. E. Baine, Chief Draughtsman, reports:

Maps published during the fiscal year ending March 31, 1928, and listed in the catalogue of Mines Branch publications, are as follows:

Map No. 171, Sudbury nickel region; scale, 1 mile to 1 inch (reprint).
Map No. 692, Diatomite deposits in the Maritime Provinces; scale, 17 miles to 1 inch (approx.).

Maps Prepared (not published)

FUEL POWER SURVEY

Map of northern portion of the province of Ontario (4 sheets); scale, 35 miles to 1 inch.
Map of western portion of the province of Ontario (4 sheets); scale, 12 miles to 1 inch.
Map of eastern portion of the province of Ontario (4 sheets); scale, 12 miles to 1 inch.

Maps on Hand

Map showing the distribution of the principal limestone formations in southern Quebec; scale, 8 miles to 1 inch.
Map showing the distribution of Ordovician limestone formations in Ontario; scale, 8 miles to 1 inch.
Map showing the distribution of the Silurian and Devonian limestone formations in southern Ontario; scale, 8 miles to 1 inch.
Map of limestone formations in Nova Scotia.
Map of limestone formations in New Brunswick.
Map of limestone formations in Gaspe peninsula, Quebec.
Map of limestone formations in southern Manitoba.
Map of limestone formations in southern Alberta.
Map of limestone formations in British Columbia.

Two hundred and forty-seven page maps, drawings, charts, and flow-sheets were prepared during the year.

Nine hundred and eighty-three negatives, and black and white prints were made from the photostat machine.

Five hundred and sixty-one negatives, black and white, and blue prints were made from the blue-print machine.

Seventy-one half-tone blocks and zinc cuts were sent out, received, and filed during the year.

DISTRIBUTION OF PUBLICATIONS

During the fiscal year ending March 31, 1928, the distribution of Mines Branch reports, bulletins, memorandum series, press bulletins, maps, lists of mine operators, etc., amounted to 137,498 copies. This is the largest distribution made in a single year by the Mines Branch, and it is accounted for to a great extent by the wide distribution of the pamphlet entitled: "Instructions for Burning Coal, Coke, and Peat."

Mr. H. A. Adams and Mr. C. R. Herbert were employed temporarily as clerk, grade II, and packer and helper, respectively, during the year, to assist in the distribution work.

LIBRARY

Mrs. O. P. R. Ogilvie, Librarian, reports:

Accessions to the library, 1927:

Books (by purchase)	355
Books (by gift)	74
Books (annual binding)	166
Books (complete unbound volumes)	165
Canadian Government documents (by gift and exchange)	1,727
British and Foreign Government documents (by gift and exchange)	1,114
Scientific societies, bulletins, proceedings, and transactions (by gift and exchange)	1,262
Pamphlets (by gift)	67
Trades catalogues (by gift)	196

Accessions to the library during 1927 exceeded those for 1926, and much time was devoted to readjusting the shelves, that this increase might be properly placed.

Requests for translations of French and German technical articles were received in the library with such frequency that the services of a temporary assistant were required in order to meet this constantly increasing demand.

The year's work was marked by the installation of additional equipment, and much progress was made toward a general readjustment through the library.

EXPLOSIVES DIVISION

Lt.-Col. G. Ogilvie, Chief Inspector of Explosives

Explosives Factories

The only new factory licensed in the year ending March 31, 1928, was that of the Dominion Fireworks Manufacturing Company, Dixie, Ont. Two factories ceased operation: the National Explosives Company, Limited, Camp Mohawk, which closed in August, 1927, and the Mexco Company, Swastika, Ont., at the end of the calendar year.

The demand for commercial explosives, judged by their production, continues to increase, the output during 1927 having been over 10 per cent more than that of 1926.

A fatal accident occurred at the factory of the Canadian Explosives Limited, Beloeil, Que., on January 21, 1928. The unfortunate victim was engaged in the weekly cleaning of an outside catch tank in which the final waste waters from a nitroglycerine house are collected. This waste, which is largely in the form of a thin mud, is absorbed with sawdust and removed to the burning-out grounds. It contains a small quantity of occluded nitroglycerine. At the time of the accident the temperature was below zero Fahrenheit and it is believed that the nitroglycerine was detonated by some inadvertent blow. The man was killed instantly. The presence of nitroglycerine in the wash water is normal, as is also the procedure adopted in a flat terrain for the removal of the waste, but the possibility of the introduction of new devices for the more complete elimination or destruction of the nitroglycerine is engaging the attention of the manufacturers.

An accident whereby the operator lost the sight of an eye and sustained other injuries, and an associate worker was also injured, occurred at the Dominion Cartridge Company's factory, Brownsburg, Que., on October 14. Primed ·22 shells were being shaken into a loading tray when the accidental explosion of one of these caused an *en masse* explosion of the primed shells on the bench—a wholly unexpected sequel with these shells. This accident has been dealt with in the Annual Report of the Explosives Division, but it is of interest to note here that the same phenomenon was observed on February 20, 1928, but thanks to the precautionary measures adopted, no injuries were sustained by the personnel.

Magazines

There were 271 magazines under license on March 31, 1928. Licences had also been granted for 200 temporary magazines during the year.

Two permanent magazines were broken into. A case of detonators was stolen from one and two cases of dynamite from the other. A temporary magazine was also broken into and four cases of dynamite stolen.

Temporary magazine buildings, used for the keeping of explosives required in harbour construction at Port Colborne, were destroyed by the storm of December, 1927, and the contents—747 cases of dynamite and 18 cases of electric detonators—were swept into lake Erie. An officer of the division attended the salvaging operations and examined the explosives. All were recovered, 427 cases repacked with serviceable dynamite, and the remainder destroyed.

Explosives Condemned

Seven considerable stocks of high explosives, totalling 2,008 cases on inspection, were condemned, deterioration having been accelerated by exposure

when kept on outlying operations. These were destroyed by the owners. In addition, the equivalent of 1,720 pounds, distributed over 11 magazines, was condemned or destroyed, also 2,375 pounds of black blasting powders, 1,500 detonators, and a few minor items.

Prosecutions

Prosecutions were taken in nineteen cases. One, on a charge of failing to safeguard explosives awaiting transhipment, was dismissed. Convictions were obtained and fines imposed in the others. In nine cases the offence was unlawful keeping of explosives, in eight failing to keep records of receipts and issues, and in one, intoxicated when in charge of a vehicle conveying explosives.

Importations

Six hundred and eighty-one permits for importation and thirty-four special permits were issued during the year. The rejections of Chinese fireworks presented for importation continue to be high—over one-quarter of those entering via Vancouver having been refused admission in 1927. Shipments made to merchants in eastern Canada, through wholesale dealers in the United States, have latterly been practically free from rejection, as these dealers, knowing what is authorized in Canada, take the precaution of examining the consignments from China before distribution—by no means a simple task judging by the variety found in direct shipments.

Authorization of Explosives

Two new explosives were presented for authorization, examined and accepted. Of 186 samples of manufactured fireworks 79 were authorized.

Accidents

The summary of accidents occurring in the use of explosives, as given in the annual report for the division, shows a slight decrease, but those arising from playing with explosives still form its most notable, and regrettable, feature. Playing with explosives accounted for 40 accidents with 4 killed and 49 injured, out of a total from all causes (manufacture and use) of 127 accidents with 38 killed and 135 injured.

The leaflet, referred to in last report, has been issued to all schools and school inspectors in Ontario, and to the Departments of Education in all western provinces, Quebec, and Nova Scotia, who have also kindly co-operated in the matter. Many of the accidents are undoubtedly due to ignorance, and it is hoped that the admonitions and instructions given in schools may be of very material assistance in reducing the number of these accidents.

General

The activities of the deputy inspectors of the Royal Canadian Mounted Police have made possible the inspection of unlicensed premises throughout the country. During the year about 2,200 inspections were so made, besides 700 by inspectors of the division. The reports received record relatively few cases of failure to comply with the regulations. The difficulty of adequately covering the ground has been felt most in eastern Canada, but this, in the last two years, has been largely overcome by the special patrols made by the Royal Canadian Mounted Police.

The deputy inspectors of that force have also co-operated in the inspection of magazines, in the conduct of prosecutions, examination of imported fireworks, and have rendered notable service in the promotion of public safety by the instructions they have given, on all appropriate occasions, regarding the safe handling of explosives.

EDITORIAL DIVISION

F. Nicolas, Editor-in-Chief

The strength of the English publication section of the Editorial Division remained unchanged during the fiscal year ending March 31, 1928.

During the fiscal year thirty-three separate English publications were issued by the Department, consisting of annual reports, memoirs, bulletins, and pamphlets; there were issued also twenty-one lists of mine operators and mines. Ten reports were published in French.

At the end of the fiscal year there were in the hands of the King's Printer four English reports and one French translation of the Geological Survey, seven English reports of the Mines Branch, and one English report of the Explosives Division. Several reports, also, were being edited preparatory to dispatch for printing, and several French translations are now nearly ready for the printer.

The following list includes the publications issued by the various branches of the Department during the fiscal year, under the supervision of the Editor-in-Chief, and the French publications distributed[1] during that period:

DEPARTMENT OF MINES

Report No.

English Publications

2142. *Report of the Department of Mines for the Fiscal Year ending March 31, 1927:* 59 pages; 3,000 copies; published January 31, 1928.

Canada: Geology, Mines, and Metallurgical Industries (Handbook for the Second Empire Mining and Metallurgical Congress)—by Wyatt Malcolm and A. H. A. Robinson; 214 pages; 40 plates; 16 maps; 2,500 copies; published June 20, 1927.

Department of Mines: Some of the Services it Performs (Pamphlet reproducing a series of twelve advertisements relating to the Department of Mines); 17 pages; 12 plates; 2,000 copies; published July 15, 1927.

French Translations

2123. *Rapport du Ministère des Mines pour l'année se terminant le 31 mars, 1926;* 83 pages; 1,200 copies; published August 26, 1927.

2148. *Rapport du Ministère des Mines pour l'année se terminant le 31 mars, 1927;* 63 pages; 1,250 copies; published March 29, 1928.

GEOLOGICAL SURVEY

English Publications

2115. Memoir 151. Geological Series 132. *Minto Coal Basin, N.B.*—by W. S. Dyer; 42 pages; 3 figures; 2 maps; 2,500 copies; published May 2, 1927.

2118. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1925, Part C;* 175 pages; 3 plates; 14 figures; 4 maps; 3,500 copies; published July 7, 1927.

Separate: *Destor Area, Que.*—by B. S. W. Buffam; 105 pages; 1 plate; 3 figures; 1 map; 306 copies; published September 14, 1927.

2120. Memoir 152. Geological Series 133. *St. Urbain Area, Charlevoix District, Que.*—by J. B. Mawdsley; 58 pages; 2 plates; 9 figures; 1 map; 2,000 copies; published June 9, 1927.

[1] The distribution of English publications was made as usual by the branches that prepared them.

Report No.

2121. Memoir 153. Geological Series 134. *Banff Area, Alberta*—by P. S. Warren; 94 pages; 7 plates; 1 figure; 1,800 copies; published August 29, 1927.

2125. Bulletin 46. Geological Series 47. *Contributions to Canadian Mineralogy and Petrography*—by E. Poitevin, H. C. Cooke, and H. C. Gunning; 45 pages; 3 plates; 10 figures; 1,500 copies; published September 24, 1927.

2127. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1926, Part B;* 57 pages; 4 figures; 3,000 copies; published April 7, 1927.

2131. Economic Geology Series 4. *Arsenic-bearing Deposits in Canada*—by M. E. Hurst; 181 pages; 21 figures; 2,500 copies; published September 24, 1927.

2135. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1926, Part A;* 60 pages; 1 plate; 2 figures; 1 map; 3,000 copies; published September 13, 1927.

2136. *Summary Report of the Geological Survey, Department of Mines, for the Calendar Year 1926, Part C;* 143 pages; 1 plate; 21 figures; 1 map; 3,000 copies; published December 5, 1927.

French Translations

2122. Mémoire 144. Série géologique 128. *La région cartographiée du mont Albert, Québec*—by F. J. Alcock; 79 pages; 6 plates; 5 figures; 1 map; 1,000 copies; published September 15, 1927.

2126. *Rapport sommaire de la Commission géologique, Ministère des Mines, pour l'année civile 1924, Partie C* (extraits); 50 pages; 2 plates; 3 figures; 3 maps; 1,000 copies; published September 8, 1927.

2139. *Rapport sommaire de la Commission géologique, Ministère des Mines, pour l'année civile 1925, Partie C* (extraits); 124 pages; 1 plate; 4 figures; 4 maps; 1,000 copies; published March 31, 1928.

NATIONAL MUSEUM OF CANADA

2133. Museum Bulletin 48. Biological Series 13. *A Study of* BUTEO BOREALIS, *the Red-tailed Hawk, and Its Varieties in Canada*—by P. A. Taverner; 20 pages; 3 plates; 1 figure; 1,000 copies; published December 16, 1927.

MINES BRANCH

English Publications

671. *Investigations of Fuels and Fuel Testing, 1925;* 184 pages; 7 plates; 17 figures; 4,000 copies; published October 27, 1927.

Separates:

Examination of Typical Cokes Sold in Canada as Household Fuels—by R. E. Gilmore, C. B. Mohr, and others; 27 pages; 2 plates; 1 figure; 1,500 copies; published August 31, 1927.

Tests of Various Fuels made in a Domestic Hot-water Boiler at the Fuel Testing Station in Co-operation with the Dominion Fuel Board—by C. S. Malloch and C. E. Baltzer; 30 pages; 6 figures; 1,000 copies; published August 14, 1927.

Low-temperature Carbonization of Bituminous Coals—by R. A. Strong; 41 pages; 4 plates; 5 figures; 500 copies; published August 31, 1927.

Analyses of Solid Fuels—by J. H. H. Nicolls; 31 pages; 500 copies; published August 14, 1927.

673. Abrasives, Part I: *Siliceous Abrasives*—by V. L. Eardley-Wilmot; 119 pages; 14 plates; 8 figures; 4,000 copies; published September 2, 1927.

675. Abrasives, Part II: *Corundum*—by V. L. Eardley-Wilmot; 51 pages; 5 plates; 6 figures; 4,000 copies; published May 30, 1927.

677. Abrasives, Part III: *Garnet*—by V. L. Eardley-Wilmot; 69 pages; 4 plates; 19 figures; 4,000 copies; published May 27, 1927.

Pamphlet: *Experimental Ore Testing and Research Laboratories*—by W. B. Timm; 9 pages; 3,000 copies; published June 10, 1927.

682. *Preliminary Report on Limestones of Quebec and Ontario*—by M. F. Goudge; 75 pages; 16 plates; 3 figures; 4,000 copies; published August 1, 1927.

684. *Use of Alberta Bituminous Sands for Surfacing of Highways*—by S. C. Ells; 37 pages; 5 plates; 10 figures; 4,000 copies; published July 13, 1927.

Canadian Shale Oil and Tar Sand Bitumen as Sources of Gasoline by Pressure Cracking—by R. E. Gilmore; 8 pages; 500 copies; published July 16, 1927.

Lists of Mines and Mine Operators in Canada:

Natural Gas and Petroleum Wells; 1,500 copies; published July 20, 1927.
Asbestos; 1,000 copies; published June 11, 1927.
Cement Mills; 500 copies; published June 7, 1927.
Sand-Lime Brick Plants; 500 copies; published June 7, 1927.
Lime Kilns; 1,000 copies; published June 21, 1927.
Sand and Gravel Deposits; 1,000 copies; published July 19, 1927.
Stone Quarry Operators; 1,000 copies; published July 18, 1927.
Metallurgical Works; 1,000 copies; published July 9, 1927.
Milling Plants; 1,500 copies; published August 1, 1927.
Feldspar; 1,000 copies; published July 26, 1927.
Graphite; 1,000 copies; published July 23, 1927.
Mica; 1,000 copies; published August 1, 1927.
Copper and Nickel-Copper; 1,500 copies; published July 7, 1927.
Silver-Lead-Zinc; 1,500 copies; published July 30, 1927.
Gypsum; 1,000 copies; published August 1, 1927.
Salt Wells and Mines; 1,000 copies; published July 20, 1927.
Talc and Soapstone; 1,000 copies; published July 19, 1927.
Gold; 1,500 copies; published August 18, 1927.
Silver; 1,500 copies; published August 11, 1927.
Quartz; 1,000 copies; published August 6, 1927.
Producers of Miscellaneous Non-Metallic Minerals; 1,000 copies; published March 12, 1928.

French Translations

Report No.

685. *Recherches touchant les Ressources minérales et l'Industrie minière, 1924* (extraits); 72 pages; 4 figures; 1,200 copies; published March 19, 1928.

DOMINION FUEL BOARD

English Publications

8. *Why You Should Insulate Your Home*—prepared by G. D. Mallory, for the Dominion Fuel Board; 15 pages; 7 drawings; 25,000 copies; published August 4, 1927.
Reprint of No. 8: 25,000 copies; published in January, 1928.
Instructions for Burning Coal, Coke, and Peat; 14 pages; 2 figures; 100,000 copies; published September 17, 1927.
Regulations Pertaining to the Domestic Fuel Act; 8 pages; 250 copies; published October 31, 1927.
Agreement and Regulations; 8 pages; 100 copies; published November 19, 1927.

French Translations

9. *Avantages de l'Isolation thermique de votre Maison;* 16 pages; 7 drawings; 5,000 copies; published January 5, 1928.
Instructions pour le Chauffage au Charbon, au Coke et à la Tourbe; 11 pages; 2 figures; 25,000 copies; published January 9, 1928.

EXPLOSIVES DIVISION

English Publications

21. *Annual Report of the Explosives Division of the Department of Mines for the Calendar Year 1926;* 23 pages; 2,000 copies; published May 5, 1927.
Storage of Explosives; Reprint: 21 pages; 5,000 copies; published July 6, 1927.
Beware of Detonators; 4 pages; 1 plate; 20,000 copies; published July 9, 1927.

French Translations

22. *Rapport annuel de la Division des Explosifs du Ministère des Mines pour l'année civile 1926;* 24 pages; 1,000 copies; published August 12, 1927.
Méfiez-vous des détonateurs; 4 pages; 1 plate; 5,000 copies; published July 9, 1927.

DISTRIBUTION OF FRENCH PUBLICATIONS

The French publications of the Department of Mines, including those of the Geological Survey, the Mines Branch, and the Explosives Division, are distributed by the Editorial Division of the Department, the distribution being under the direct supervision of P. E. Levesque, who is also in charge of the translation section of the Editorial Division. During the fiscal year 1927-28, 14,928 copies were distributed in Canada and foreign countries, as follows: 3,251 to addresses on the mailing lists, through the Printing Bureau Distribution Office; 4,677 copies in compliance with written or personal requests, distributed from our distribution office; and approximately 7,000 copies of the pamphlet on "Instructions for Burning Coal, Coke, and Peat" to coal dealers. This distribution does not include, however, the publications sent by the Dominion Fuel Board and the Explosives Division to their correspondents.

ACCOUNTING DIVISION

ACCOUNTANT'S STATEMENT

P. R. Marshall

The funds available for the work and the expenditure of the Department of Mines for the fiscal year ending March 31, 1928, were:

	Grant	Expenditure	
		Amount	Total
	$ cts.	$ cts.	$ cts.
DEPARTMENT—			
Amount voted by Parliament	106,169 00		
Civil Government salaries	.....	75,035 00	
Grant to Imperial Institute	.....	12,848 00	
Expenses of Explosives Division	.....	9,912 00	
Civil Government contingencies	.....	5,172 40	
Grant to Canadian Institute of Mining and Metallurgy	.....	3,000 00	
			105,967 40
Balance unexpended and lapsed	.....	.....	201 60
GEOLOGICAL SURVEY—			
Amount voted by Parliament	644,780 00		
Civil Government salaries	.....	298,456 86	
Explorations, surveys, and investigations	.....	189,669 30	
Publication of reports and maps	.....	47,868 66	
Wages	.....	19,743 41	
Sundry printing and stationery	.....	18,292 08	
Museum equipment	.....	15,000 00	
Miscellaneous	.....	10,454 48	
Compassionate allowance	.....	3,000 00	
Instruments and repairs	.....	2,696 89	
Photographic supplies	.....	1,954 60	
Specimens for Museum	.....	1,925 76	
			609,062 04
Balance unexpended and lapsed	.....	.....	35,717 96
MINES BRANCH—			
Amount voted by Parliament	504,493 88		
Civil Government salaries	.....	180,878 65	
Expenses of fuel testing plant and laboratory	.....	69,914 19	
Operation of peat plant, Alfred, Ont.	.....	64,128 80	
Expenses of ore dressing and metallurgical laboratories	.....	40,368 37	
Investigation of mineral resources and deposits	.....	27,104 80	
Chemical laboratories	.....	19,394 66	
Expenses of Dominion Fuel Board	.....	16,705 43	
Printing and stationery	.....	27,575 05	
Wages	.....	13,721 16	
Miscellaneous	.....	2,590 58	
Compensation to J. H. Fortune for quarters, etc.	.....	400 00	
Miscellaneous gratuity	.....	168 88	
Advances 1927–28 to be accounted for in 1928–29	.....	1,300 00	
			464,250 57
Balance unexpended and lapsed	.....	.....	40,243 31
DOMINION OF CANADA ASSAY OFFICE—			
Amount voted by Parliament	26,000 00		
Earnings	133 50		
Salaries of staff	.....	20,265 00	
Assayers' supplies	.....	1,466 42	
Contingencies	.....	1,043 41	
Premium on bonds	.....	462 50	
Electric burglar alarm service	.....	360 00	
			23,597 33
Balance unexpended and lapsed	.....	.....	2,536 17
	1,281,576 38	.....	1,281,576 38

Summary

—		Grant	Expenditure	Grant not used
		$ cts.	$ cts.	$ cts.
Civil Government salaries		578,025 00	559,542 91	18,482 09
Department		25,849 00	25,760 00	89 00
Geological Survey		338,000 00	310,605 18	27,394 82
Mines Branch		313,400 00	283,203 04	30,196 96
Dominion of Canada Assay Office, Vancouver, B.C.	$26,000 00			
Earnings	133 50			
		26,133 50	23,597 33	2,536 17
Miscellaneous gratuities		168 88	168 88	
		1,281,576 38	1,202,877 34	78,699 04

Casual Revenue

Sales of equipment, explosives permits, publications, etc.		$3,790 88
Fines for violation of Explosives Act		205 00
Gold bullion recovered from residue	$ 712 23	
Less loss on gold bullion	59 80	
		652 43
Arrears from 1926–27		432 32
Miscellaneous		111 40
		$5,192 03

INDEX

PAGE

Accidents. *See* Explosives division
Accounting division 60
Adams, F. D..... 20
Adams, H. A..... 52
Addresses and papers published, list of. 8
Alberta, field work..... 15, 18
Alcock, F. J..... 17
Anderson, A. K..... 44, 45
Anderson, R. M..... 36, 38
Anrep, A. 15
Anthracite. *See* Dominion Fuel Board
Anthropological division 34
Archæology 34
Assay office, Vancouver, B.C..... 51
Baine, H. E..... 52
Baltzer, C. E..... 46
Bannerman, H. M..... 16
Barbeau, C. M..... 34
Bartlett, R. 18
Beer, H. L..... 44, 45
Bell, W. A..... 21, 22
Biological division 36
Blakely, D. 37
Borings division 22
Bostock, H. S..... 14
Bowles, K. W..... 47
Boyd, W. H..... 17
British Columbia, field work..... 14, 17
  Office 31
Brownell, G. M..... 16
Buisson, Arthur 43
Burrough, E. J..... 46, 47
Burwash, E. M..... 15
Butterworth, J. V..... 19
Cairnes, C. E..... 14, 20
Campbell, A. H..... 11
Camsell, Charles 1–7, 19
Canada, mineral production..... 4
Carnochan, R. K..... 44, 45
Casey, J. M..... 44
Ceramics division 48
Chemistry division 50
Chipman, K. G..... 18, 19
Clark, T. H..... 17
Clarke, G. G..... 30
Clarke, L. Y..... 11
Coal. *See* Dominion Fuel Board
Cockfield, W. E..... 14
Cole, L. H..... 42, 44
Coleman, C. J..... 46, 47

PAGE

Collin, L. P..... 49
Collins, W. H..... 11, 16, 20, 32
Connell, G. P..... 46, 47
Connolly, G. 47
Cooke, H. C..... 16
Coyne, B. P..... 45
Craig, J. W..... 49
Daughtry, G. S..... 11
Dawson, G. M..... 13
Deputy Minister. *See* Camsell, Charles
Dickison, A. 28
Director's report. *See*
  Camsell, Charles
  Collins, W. H.
  McLeish, J.
Distribution division 30, 52
Dolmage, Victor 14, 31
Dominion Fuel Board..... 6
Draughting division
  Geological Survey 28
  Mines Branch 52
Dyer, W. S..... 11
Editorial division 56
Educational collections 21
Ells, S. C..... 42
Ellsworth, H. V..... 20
Emmons, G. T..... 36
Emmons, R. C..... 16
Ethnology 34
Evans, C. S..... 15
Expenditure. *See* Accounting division
Explosives division 54
Fabry, R. J. C..... 20
Faribault, E. R..... 17
Ferrier, W. F..... 21
Field work
  Archæology 34
  Biology 36
  Ceramics 48
  Ethnology 34
  Geology 14
  Mines Branch 41
  Palæontology 21
  Topography 17
Forsey, Mrs. F. E..... 30
Fortune, H. T..... 46, 47
Fossils. *See* Palæontological division
Fraser, F. J..... 24
Fréchette, H. 48, 49
Freeman, C. H..... 44

PAGE
French publications 56–59
Fritz, M. A. 22
Fuel Board 6
Fuel Testing division 46
Gas, natural. *See* Borings division
Geological division 14
Geological Information and Distribution division 30
Geological Survey accounts 60, 61
Reports 11–31
Gibbon, J. M. 35
Gill, A. F. 46
Gilmore, R. E. 46
Godard, J. S. 44, 45
Goudge, M. F. 41, 43
Grant, J. C. Boileau 34
Gunning, H. C. 11, 15, 20
Güssow, W. C. 11
Haanel, B. F. 46
Hadwen, S. 36
Hanson, G. 14
Harkin, J. B. 38
Haultain, A. G. 18
Henderson, J. A. L. 27
Herbert, C. R. 52
Hotchkiss, C. P. 7
Hume, G. S. 15
Hunter, Fenley 5, 13
Imperial Oil Company 33
Indians. *See* Anthropological division
Ingall, E. D. 22
International Nickel Corp. 33
Jenness, D. 34
Johnson, Claude E. 37
Johnston, J. D. 44, 45
Johnston, W. A. 15
Joy, A. H. 39
Kerr, F. A. 14, 31
Kindle, E. M. 21, 22
Kritsch, W. 47
Laing, H. M. 36
Larochelle, A. E. 44
Lectures in Museum 4, 34
Leverin, H. A. 50
Levesque, P. E. 59
LeWorthy, G. E. 47
Library, Geological Survey 30
Mines Branch 52
Lutes, L. 45
Mabee, H. C. 44, 45
McClelland, W. R. 45
Macdonald, J. A. 17
McDonald, R. C. 18, 19
MacKay, B. R. 15
Mackenzie, G. P. 37

PAGE
McKinnon, A. T. 20
McLean, S. C. 19
McLearn, F. H. 15, 22
McLeish, J. 40
McMahon, J. F. 48, 49
Maddox, D. C. 24
Mahoney, M. 24
Malcolm, Wyatt 30
Malloch, E. S. 46
Malte, M. O. 37
Manitoba, field work 15
Mantle, A. W. 46
Maps. *See* Geographical division
Marshall, J. R. 14
Marshall, P. R. 60
Mawdsley, J. B. 16
Metallurgical division 44
Miller, W. H. 19
Mineralogical division 20
Mineral Resources division 41
Mines Branch, accounts 60
Reports 40–53
Mining Corporation of Canada 33
Mohr, C. B. 47
Mond Nickel Company 33
Moran, J. 50
Moran, P. J. 11
Museum. *See* National Museum of Canada
National Aniline and Chemical Company of Buffalo 33
National Museum of Canada 32
Neate, F. J. 7
Nettell, A. J. C. 31
New Brunswick, field work 17, 18
Nichols, D. A. 18, 20
Nicolas, F. 56
Nicolls, J. H. H. 46
Norman, G. W. H. 17
North West Territories, field work 17
Nova Scotia, field work 17
Offord, R. J. 46, 47, 50
Ogilvie, Lt.-Col. G. 54
Ogilvie, Mrs. O. P. R. 52
Ontario, field work 16
Ore Dressing division 44
Organization chart 1
Ouimet, R. E. 11
Palæontological division 21
Papers and addresses published, list of 8
Parsons, C. S. 44, 45
Patch, C. L. 34, 37
Phillips, J. G. 48
Photographic division 30
Picher, R. H. 50

PAGE

Poitevin, Eugene 20
Porsild, M. P. 39
Publications, list of.....8–10, 56–59
Quebec, field work..... 16, 18
Quirke, T. T..... 16, 20
Reid, V. I..... 11
Rivington, J. 50
Road Materials division..... 48
Robinson, A. H. A..... 43
Rochon, J. 37
Rogers, R. A..... 45
Rosewarne, P. V..... 46, 47
Ross, C. C..... 26
Sadler, A. 50
Salaries. *See* Accounting division
Saskatchewan, field work..... 15
Senécal, C. Omer..... 28
Sheppard, A. C. T..... 17, 19
Smith, Harlan I..... 34
Smitheringale, W. V..... 17
Soper, J. D..... 36
Spence, H. N..... 18, 19
Spence, H. S.....41, 42, 44
Spence, J. W..... 18
Starnes, Col. C..... 39
Steeves, S. M..... 19
Sternberg, C. M..... 22
Stockwell, C. H..... 11, 16
Strong, R. A..... 46, 47
Swinnerton, A. A..... 46, 47

PAGE

Tanton, T. L..... 16
Taverner, P. A..... 36, 38
Thompson, E. A..... 50
Timm, W. B..... 44
Tolman, C. 16
Topographical division 17
Traill, R. J..... 44, 45
Vancouver Assay office..... 51
Wait, E. H..... 44
Wait, F. G..... 50
Waite, A. V..... 11
Walker, J. F..... 15
Watkins, R. T..... 49
Watson, J. S..... 35
Watson, W. R..... 37
Way, E. G. O..... 46, 47
Weeks, L. J..... 17
White, W. F..... 44
Wickenden, R. T. D..... 25
Wiggin, H., and Company..... 33
Wilmot, V. L..... 43
Wilson, A. E..... 22
Wilson, A. W. G..... 41
Wilson, M. E..... 16, 34
Wintemberg, W. J..... 34
Wright, J. F..... 15
Young, A. 11
Young, Charles H..... 36
Young, G. A..... 14
Yukon, field work..... 14

REPORT

OF THE

MINISTER OF AGRICULTURE

FOR THE

DOMINION OF CANADA

FOR THE

YEAR ENDED MARCH 31, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

CONTENTS

	Page
General	5
Dominion Experimental Farms and Stations	7
Central Experimental Farm	8
Division of Animal Husbandry	8
Division of Field Husbandry	8
Division of Horticulture	9
Cereal Division	10
Division of Forage Plants	11
Poultry Division	12
Division of Chemistry	12
Division of Botany	13
Fibre Division	14
Division of Agricultural Bacteriology	14
Tobacco Division	15
Bee Division	15
Division of Illustration Stations	16
Division of Extension and Publicity	17
Other activities	17
Branch Farms and Stations	18
Experimental Station, Charlottetown, P.E.I	18
Experimental Fox Ranch, Summerside, P.E.I	18
Experimental Farm, Nappan, N.S	19
Experimental Station, Kentville, N.S	20
Experimental Station, Fredericton, N.B	20
Experimental Station, Ste. Anne de la Pocatière, Que	21
Experimental Station, Lennoxville, Que	22
Experimental Station, Cap Rouge, Que	22
Tobacco Experimental Station, Farnham, Que	23
Experimental Station, La Ferme, Que	24
Experimental Station, Kapuskasing, Ont	24
Experimental Station, Harrow, Ont	25
Experimental Station, Morden, Man	26
Experimental Farm, Brandon, Man	26
Experimental Farm, Indian Head, Sask	27
Experimental Station, Rosthern, Sask	28
Experimental Station, Scott, Sask	28
Experimental Station, Swift Current, Sask	29
Experimental Station, Lethbridge, Alta	29
Experimental Station, Lacombe, Alta	30
Experimental Sub-station, Beaverlodge, Alta	31
Experimental Station, Summerland, B.C	31
Experimental Station, Invermere, B.C	32
Experimental Farm, Agassiz, B.C	32
Experimental Station, Saanichton, B.C	33
Experimental Sub-stations	34

67983—1½

PAGE

Dairy and Cold Storage Branch 34
General 34
The Export Trade 35
The Grading of Dairy Produce 36
Cargo Inspection 37
Iced Butter Car Service 37
Iced Cheese Car Service 38
Dairy News Letter 38
Dairy Market Intelligence 38
Subsidies to Cold Storage Warehouses 38
Creamery Cold Storage bonuses 39
Research in Dairying 39
The Administration of the Dairy Industry Act 39
Milk Utilization Service 40
Notes 40

Health of Animals Branch 41
Animal Contagious Diseases Division 41
Pathological Division 44
Meat and Canned Foods Division 46

The Live Stock Branch 47
Horse Division 47
Fur farming 49
Cattle Division 50
Poultry Division 53
Sheep and Swine Division 59
Markets Intelligence and Stock Yards Services 74

The Seed Branch 77
Laboratory Division 77
The Seed Division 81
The Feed Division 89
Markets and Fertilizer Division 92

Entomological Branch 105
Division of Field Crops and Insects 105
Division of Forest Insects 107
Division of Foreign Pests Supression 110
Division of Systematic Entomology 112
Field Laboratories 119
Publications 125

The Fruit Branch 126
Inspection Service 127
Markets Division 132
Transportation Division 134

The Publications Branch 137

Supervision of Race-Track Betting 141

REPORT

OF THE

MINISTER OF AGRICULTURE

1927 - 1928

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit to Your Excellency a report of the Department of Agriculture for the fiscal year ended March 31, 1928.

The work of the department was carried out in a most satisfactory and efficient manner, and there will be found included herein a summary of the operations of the different branches of the department, all of which is laid before Your Excellency under their respective headings.

New legislation affecting the department was passed by Parliament during the period covered by this report as follows:—

Chapter 40 of the Statutes of George V, 1926-27. The Agricultural Pests Control Act, 1927. An Act which dealt with the control, manufacture, importation and sale of insecticides and fungicides used in agriculture. Assented to April 14, 1927.

Chapter 57 of the Statutes of George V, 1926-27. An Act amending the Fruit Act, which provided for the inspection and issuance of export certificates in connection with fruit intended for export. Assented to April 14, 1927.

Chapter 60 of the Statutes of George V, 1926-27. An Act to amend the Live Stock and Live Stock Products Act, 1923. This amendment was primarily for the purpose of putting into effect certain recommendations that had been made to the department in connection with the operation of co-operative associations on live stock exchanges and stockyards. Assented to April 14, 1927.

The following Orders in Council were passed during the period covered by this report, establishing new regulations or amending existing regulations under the various Acts and policies administered by the department:—

By Order in Council P.C. 717 of April 20, 1927, the regulations under the Destructive Insect and Pest Act were amended in order to provide, amongst other things, for steps to be taken towards the control of the Oriental Peach Moth in Canada.

By Order in Council P.C. 718 of April 20, 1927, the counties of Verchères, Chambly, St. Jean, Laprairie, Napierville, and part of the county of Richelieu were set aside as a tuberculosis-free restricted area.

By Order in Council P.C. 794 of May 4, 1927, the regulations in regard to restricted areas were amended in so far as the movement of cattle into or out of restricted areas are concerned. Provision was also made for the transportation of veterinary inspectors conducting the tests, while the payment of compensation for reacting grade bulls, steers and lumpy-jaw cattle was withdrawn.

By Order in Council P.C. 1079 of June 6, 1927, the regulations under the Dairy Industry Act were amended in order that some changes could be made in the specifications for butter boxes.

By Order in Council P.C. 1708 of June 6, 1927, the county of Prince Edward, in the province of Ontario, was established as a restricted area.

By Order in Council P.C. 1111 of June 8, 1927, the regulations under the Fruit Act were amended in order to provide for the marking of fruits in ungraded packages.

By Order in Council P.C. 1202 of June 24, 1927, the regulations under the Fruit Act were amended to make certain changes in the dimensions of cantaloupe crates, bushel baskets, etc.

By Order in Council P.C. 1609 of August 8, 1927, regulations were established under the Fruit Act for the inspection of fruit offered for export out of Canada, and by Order in Council P.C. 1482 of September 24, 1927, the regulations covering the sale of apples in baskets were amended.

By Order in Council P.C. 1526 of August 11, 1927, the regulations under the Destructive Insect and Pest Act, dealing with the importation of peaches, peach nursery stock, etc., from certain United States areas, were amended.

By Order in Council P.C. 1787 of September 24, 1927, regulations were established under the Live Stock and Live Stock Products Act, covering the grading of hogs at country points.

By Order in Council P.C. 1858 of September 24, 1927, authority was granted for the issuance of a proclamation bringing the Agricultural Pests Control Act into effect as from October 1, 1927.

By Order in Council P.C. 2059 of October 22, 1927, the island of Bouchard, in the St. Lawrence river, was set aside as a restricted area.

By Order in Council P.C. 87 of January 16, 1928, the regulations under the Meat and Canned Foods Act were amended in order to place on a proper basis the shipment of carcasses from one province to another by bona fide farmers.

By Order in Council P.C. 183 of February 4, 1928, the regulations under the Meat and Canned Foods Act covering the inspection of preserved fruits and vegetables were amended.

By Order in Council P.C. 182 of February 4, 1928, the county of Missisquoi, in the province of Quebec, was established as a restricted area, and by Order in Council P.C. 229 of February 10, 1928, the county of Iberville was established as a restricted area.

By Order in Council P.C. 262 of February 17, 1928, the parishes of Prince William, Dumfries, McAdam and Kingsclear, in the province of New Brunswick, were established as a restricted area, and by Order in Council P.C. 445 of March 20, 1928, the counties of Rouville and Brome, in the province of Quebec, were established as a restricted area.

World's Poultry Congress

In the month of July, 1927, the World's Poultry Congress was held in Ottawa, and proved to be entirely successful. Representatives and exhibits were brought from many countries in Europe, from the United States and from all parts of the British Empire. The proceedings of the Poultry Congress have been published in a special report.

Diamond Jubilee Dinner

As a part of the Diamond Jubilee celebration which took place last year, the Royal Agricultural Winter Fair, held in October, 1927, was made the occasion of an Agricultural Jubilee. The Department of Agriculture staged a comprehensive exhibit covering all branches of agriculture, and as part of the celebration, an All-Canadian Products dinner was held shortly after the opening of the fair.

Imperial Agricultural Research Conference

In October, an Imperial Agricultural Research Conference was called in Great Britain at which representatives of the agricultural research workers from all parts of the British Empire were present. The Canadian representatives were Dr. J. H. Grisdale, Deputy Minister of Agriculture; Dr. E. S. Archibald, Director of Experimental Farms; Mr. W. T. Macoun, Dominion Horticulturist; Dr. J. M. Swaine, Associate Dominion Entomologist, and Dr. E. A. Watson, Chief Animal Pathologist.

The deliberations of the conference were of very great value, and as a result it is hoped to co-ordinate the work of all the agricultural research workers within the Empire in order to make the results of that work more effective.

DOMINION EXPERIMENTAL FARMS AND STATIONS

Wet weather during May delayed seeding operations generally throughout Canada and, on the whole, the season was fairly well advanced before this work was finished. Weather conditions improved in the latter part of June and into July. Crops made excellent growth, with the exception of fodder corn which suffered from the excessive moisture. On the whole, crops of all descriptions did exceptionally well, and larger yields were obtained than earlier conditions promised. The quality of grains and potatoes, however, was lowered by the adverse conditions experienced during the season. The total value of all field crops in 1927 is estimated by the Dominion Bureau of Statistics at $1,134,192,600 as compared with $1,104,983,100 in 1926.

AREAS AND ESTIMATES OF YIELD AND VALUE OF FIELD CROPS 1927

Crop	Area	Yield per acre	Total Yield	Weight per measured bushel	Average price per bushel	Total Value
	acres	bush.	bush.	lbs.	$	$
Fall wheat	853,258	26·1	22,266,000	58·96	1·24	27,544,000
Spring wheat	21,606,896	19·3	417,758,700	58·74	0·99	411,796,000
All wheat	22,460,154	19·5	440,024,700	58·75	1·00	439,340,000
Oats	13,129,963	33·2	439,712,700	33·76	0·51	225,879,000
Barley	3,505,713	27·7	96,938,000	47·20	0·66	64,193,000
Rye	743,311	20·1	14,950,600	55·80	0·81	12,255,500
Peas	150,800	18·5	2,794,900	59·86	1·76	4,958,800
Beans	66,778	15·5	1,037,300	59·80	2·32	2,408,300
Mixed grains	1,004,507	37·5	37,621,500	42·53	0·72	27,001,000
Buckwheat	471,333	23·1	10,890,000	47·43	0·89	9,727,000
Flax	475,852	10·3	4,884,600	55·42	1·55	7,562,000
Corn for husking	131,626	32·4	4,262,000	54·66	0·99	4,212,000
		cwt.	cwt.		per cwt.	
Potatoes	572,373	81·2	46,458,000	.....	1·17	54,341,000
Turnips, mangels, etc	197,177	188·9	37,248,000	.....	0·46	17,282,000
		tons	tons		per ton	
Hay and clover	10,226,895	1·70	17,370,000	.....	10·41	180,835,000
Fodder corn	471,569	7·52	3,547,500	.....	4·47	15,849,000
Sugar beets	44,103	8·87	391,000	.....	7·79	3,044,000
Alfalfa	910,156	2·37	2,157,300	.....	12·03	25,946,000

NUMBER OF LIVE STOCK IN THE DOMINION 1923-1927

—	1923	1924	1925	1926	1927
Horses	3,530,641	3,588,788	3,544,041	3,558,849	3,421,857
Milch cows	3,659,365	3,726,985	3,830,175	3,951,335	3,894,311
Other cattle	5,586,866	5,733,851	5,477,123	5,208,815	5,277,927
Sheep	2,753,860	2,684,743	2,755,556	2,035,507	3,262,706
Swine	4,405,316	5,069,181	4,426,148	4,470,771	4,694,789

CENTRAL EXPERIMENTAL FARM

Division of Animal Husbandry

Horses.—The breeding policy at the Central Experimental Farm is directed toward production, at cost, of the horses required for general farm labour, and it also serves as a basis for the advice offered to farmers in such matters. During the year eight foals were raised, all sired by the imported stallion "Sandy Mac." This horse has developed well, and is proving very sure and prepotent. The established standard of excellence of the working force of horses has been well maintained during the past year.

Cattle.—Poor markets in Great Britain, the meat trade war between British and American interests in the Argentine, and the high prices obtaining for cattle in the United States markets have resulted in the closing of the trade in live cattle between Canada and Great Britain for the time being. The foregoing conditions have made it more profitable for the Canadian breeder and feeder to dispose of his cattle in the United States markets. A report of the last experimental shipment of cattle to Great Britain, on March 26, 1927, will be found in the annual report of the Division of Animal Husbandry for the year ending March 31, 1927.

The Central Experimental Farm has maintained its position in the front rank as a producer of high class dairy bulls. During the year, seven Ayrshire, two Holstein, and two Jersey bulls were inspected and passed for Advanced Registration, four of these animals being registered in Class A.A. The Advanced Registration of females has also been taken up through the policy inaugurated by the Holstein Freisian Association.

In conjunction with the Health of Animals Branch, special studies are being made of the problem of contagious abortion. Additional pasture for the main herd is much needed. While no outstanding individual milk production records were made, the general average of the whole herd has been well maintained.

Sheep.—The flock of sheep consists of Shropshires, Leicesters, and cross bred ewe lambs of these two breeds. The average weight of Shropshire fleeces was 6·95 pounds and that of Leicesters 7·36 pounds; the former however graded better.

Swine.—The herd of swine consists of pure bred Yorkshires and Berkshires. The decline in pork prices resulted in a falling off in the demand for breeding stock. Of the 91 head sold for this purpose, 72 were boars. Tests are under way to determine the economic value of Acid Utal, the feeding value of Provendine, and the value of "Smoked Salt" for the home curing of pork and bacon. A number of feeding experiments are also under way.

Dairy.—In conjunction with the Division of Bacteriology further studies have been made of the milking machine from the standpoint of efficiency and the production of clean milk. The manufacture of cream, butter, buttermilk, Cheddar cheese and Meilleur cheese was carried on as usual in the dairy.

Division of Field Husbandry

On the Central Experimental Farm all the main farm crops yielded well in 1927, with the exception of potatoes which yielded only 125·7 bushels per acre as compared with an average of 246·3 bushels per acre over a six-year period. The yields of crops secured on the Central Farm are much heavier than the average yields in the province of Ontario, due largely to the fact that the land receives a liberal application of manure, good seed is planted, the crops are grown in good rotations, and the proper tillage methods are followed.

This would appear to indicate that if such practices were more generally adopted throughout the country, and in many instances this might be done at a fairly reasonable cost, the result would be very materially increased yields.

All the hay crops, including red clover alone and timothy alone, gave excellent yields. Two cuttings of hay are always harvested. Corn for silage although yielding somewhat above the average was not fully matured, having a dry matter content of only 18 per cent as compared with the usual 20 to 25 per cent. This was probably due to the rather cool summer. On heavy clay soil at Ottawa unthinned sunflowers are very much superior to corn, the average yield over a period of six years being 16·52 tons and 10·1 tons per acre respectively. On a light loamy soil however the yields of these two crops are about equal, but as the corn is easier to handle when ensiling and gives a slightly superior silage it is preferred over sunflowers when grown on this type of land.

Occasionally difficulty is experienced in making desirable silage from crops other than corn. Practically all legumes are liable to give trouble if the proper methods of ensiling are not followed, but alfalfa is perhaps more difficult than any other crop to ensile. A series of experiments are now under way with a view to learning the best stage at which to cut crops so as to produce the best silage, what amount of wilting, if any, should be given in the field before placing the crops in the silo, whether or not water should be added to the silage, and whether any other crop may be added to certain silage crops to improve their quality.

An experiment has been conducted for the past sixteen years on a four-year rotation of mangels, oats, clover hay and timothy hay, in order to determine the yields which may be obtained by applying farm manure to one piece of land, commercial fertilizers to another, and a mixture of these materials to a third piece of land. The results are in favour of farm manure although commercial fertilizers have also given profitable returns. However where farm manure is available it should be conserved and used to the best advantage, but where the quantity is insufficient the use of a certain amount of commercial fertilizers might well be considered.

Much useful information on crop rotations and cultural methods will be found in Bulletin 72, new series, entitled "Crop Rotations and Soil Management for Eastern Canada," and Bulletin 98, new series, entitled "Crop Rotations and Soil Management for the Prairie Provinces," both of which have recently been issued.

Very useful information has been obtained from experiments under way at the Dominion Experimental Station, Swift Current, Sask., for the purpose of ascertaining what rotations and cultural methods conserve soil moisture most effectively, what crops use the smallest quantity of water in their growth and what crops will stand over long periods of drought and resume growth when moisture conditions again become satisfactory.

Experiments have been undertaken with a view to improving the extensive areas of range lands in southern Alberta and Saskatchewan so that more cattle may be carried thereon than is now possible. This work is being conducted on a portion of the ranch of Gilchrist Brothers Limited who are co-operating to the extent of supplying and looking after the range cattle which are placed on the various fields of the ranch.

Division of Horticulture

The Melba apple, originated in the Division of Horticulture, received outstanding recognition during the past year, both in the United States and in Europe, being awarded the Wilder Silver Medal, the highest award of the American Pomological Society, and also a Gold Medal Diploma at the International Horticultural Exhibition, held in Brussels, Belgium. A collection of

new and promising varieties of apples for commercial use was sent to the International Horticultural Exhibition at Paris, France, and was awarded the Grand Silver Gilt Medal Diploma.

The Dominion Horticulturist was Chairman of the Fruit Committee of the Imperial Agricultural Research Conference, and delivered addresses at the Fifth International Genetic Conference and at the International Horticultural Congress.

One of the major lines of experimental work carried on by the Division is the breeding of new varieties of fruits, and certain varieties originated in the division are now gradually taking their places among the varieties recommended for planting in Canada.

Nutritional studies with strawberries and apples have been under way for the past three years, and the work is now being expanded. In connection with strawberries some very interesting and suggestive results have been obtained and information is being accumulated which should ultimately be of value in diagnosing malnutrition.

The extension experiments in Quebec orchards are now concentrated on two areas, Abbotsford and Chateauguay.

In co-operation with the Canadian Seed Growers Association the Division is assisting in making available, as soon as possible, high class vegetable seed produced in Canada. There is a great demand for the new varieties of early corn originated in the Division of Horticulture, and three of these, Pickaninny, Banting and Early Malcolm are now in the hands of seed merchants.

A new species of lilac has been originated in the Division. It is known as Syringa Prestoniae and is a cross between Syringa villosa and Syringa reflexa. There are many charming varieties..

Experiments under glass with fruits, vegetables and flowers were carried on along much the same lines as in previous years. Home canning and dehydration experiments also were continued.

Cereal Division

An important phase of the work of the Cereal Division is the production and development of superior new varieties or strains of cereals. While other means are not neglected the Division depends chiefly upon artificial crossing of carefully chosen parent varieties as a means of obtaining improved types. This work is confined chiefly to the Central Experimental Farm at Ottawa and to the Federal Rust Research Nursery located at the Agricultural College, Winnipeg, Man. A number of exceedingly promising combinations have been effected and it is the policy of the Division to send out seed of these most promising "populations" to the different branch Farms throughout Canada, where they are thoroughly exploited. Naturally, spring wheat, owing to its supreme importance to Canada, has received the greatest attention, but due consideration has been given to other grain crops.

Work is now under way towards developing a classification of oat varieties which may be helpful to the breeder, to the grower of registered seed, and to the trade. A number of new oat forms which show exceptional promise have been produced by this Division.

In view of the recent revival of interest in the malting barley trade, varieties particularly suitable for malting purposes are now being sought.

In 1926 the division distributed Garnet wheat to some 3,000 farmers throughout Western Canada for trial. The results of those trials, together with those recorded at the various branch Farms and by special co-operators, have been published in bulletin 83, new series, entitled "Garnet Wheat." Another variety which is attracting a good deal of attention is "Reward" produced by

this division from a cross between Marquis and Prelude. It appears to have the ability to cope with stem rust better than most of the other common wheat varieties.

The work of breeding for disease resistance is carried on at the Dominion Rust Research Laboratory and Nursery at Winnipeg and it may be stated that very definite and substantial progress has been made.

Realizing the great importance to Canada of maintaining the highest possible quality in the spring wheat produced in the Prairie Provinces an immense amount of work is carried on annually by this division in comparing not only the baking qualities of different varieties in general but the effects on the quality for baking purposes of different varieties and selections when grown under widely different conditions.

Every effort is being made to assist and encourage all organizations and individuals who are interested in the production of Elite Stock Seed. In this work the division co-operates closely with the Canadian Seed Growers' Association.

Considerable attention is being devoted to a proper classification of cereal varieties. The Division has also continued its assistance to the Canadian Seed Growers' Association in connection with the verification of Elite Stock Seed.

Farmers have been encouraged to test leading varieties of different kinds on their own farms. In addition to furnishing valuable information, this plan has established a bond between these men and our branch Farms and Stations.

Division of Forage Plants

Variety tests of field corn for fodder were continued at the Central Experimental Farm, Ottawa. The different lots of corn are being divided into groups according to the length of time required to mature. The results will be reported accordingly and this should be of distinct advantage to growers seeking information as to the most suitable variety for any district. It has been necessary to discontinue the variety tests of corn at the Harrow Experimental Station, owing to the prevalence of the corn borer.

Sunflowers were tested at the Central Experimental Farm for yield and general suitability. In conjunction with the Canadian Seed Growers' Association tests were conducted with a number of varieties of field roots for the purpose of determining their eligibility for registration. Tests of annual hays had to be held over this year due to the lack of sufficient land. It was again demonstrated that red clover seed produced locally is much superior for Canadian conditions than imported seed.

An important phase of the work of this division is the breeding of improved strains of grasses, clovers, field roots, corn and sunflowers, and some promising material is being developed. A strain of purple top swede has been selected for its globe shaped root, short neck, and quality and firmness of flesh. A few recombinations of the more desirable looking inbred strains of corn were tested against the original parent varieties, and in practically all cases the recombinations were superior to the original parent varieties. A large number of inbred strains of sunflowers appear quite outstanding both in their growth characteristics and in their ability to withstand disease.

The classification of forage plants is proceeding, and in this connection there is in course of preparation a pamphlet on soy beans.

In connection with the investigations of experimental methods our efforts during the past year were directed largely towards securing fuller information on the relationship of the method of handling shrinkage samples to their ultimate dry matter content.

The problem of turf grass and range improvement was given considerable attention. Several of the strains of bent grass are proving themselves to be outstanding under conditions prevailing at the Central Farm.

A comprehensive series of experiments is being laid out at the Dominion Range Experiment Station, Manyberries, Alberta, where range investigations are being conducted jointly by this division and the Division of Field Husbandry.

Poultry Division

There has never before been such a marked development in the poultry industry in Canada as that which took place during the past year. Better hatching results were obtained than in 1926, and an expansion of this branch of the industry is indicated for the coming season. The favourable season induced rapid growth of young stock and satsifactory maturity. Slightly increased feed prices were more than offset by the prices of eggs, which were considerably higher than in the previous year. Winter egg prices remained fixed for a longer period than usual, probably due, to some extent, to the anti-dumping regulations.

The third World's Poultry Congress, which convened at Ottawa from July 27 to August 4 was outstandingly successful. The Dominion Poultry Husbandman was General Director of the Congress, and he has now been honoured with the Presidency of the International Association of Instructors and Investigators in Poultry Husbandry under whose auspices the triennial congresses are held.

The poultry work at the Central Experimental Farm was exceptionally satisfactory. The increased production is attributable to the breeding work which has been carried on for a number of years. The registration and contest work has increased to such an extent that it is now one of the major activities of the division.

Considerable progress has been made in the experimental work throughout the Experimental Farms system during the past year. The greatest limiting factor at present is the incidence of disease, but every effort is being made to overcome this difficulty. With the appointment of trained assistants and poultrymen upon the branch Farms there has been an increase in the experimental work, and experiments of a more scientific nature have been undertaken.

In the thirteen egg-laying contests conducted by this Division during the past year, the average egg production per bird was 172·5 as compared with 122·5 eight years ago. Poultry registration is expanding rapidly. The activities of the division in the province of Quebec are confined chiefly to registration work, although assistance is given in the way of lectures and demonstrations as the need arises.

Poultry disease work is carried on in co-operation with the Health of Animals Branch.

Division of Chemistry

That the value of chemistry as applied to farming operation is becoming more and more recognized is evidenced by the constantly increasing demands received by this Division for information in respect to soils, manures, fertilizers, feeding stuffs, etc. As an indication of the volume of work undertaken it may be stated that during the past year 4,338 samples were received for examination and reported on. These samples comprised soils, manures, fertilizers, forage, plants, fodders, feeding stuffs, waters, dairy products, insecticides and fungicides, and samples from the Meat and Canned Foods Division.

An investigation has recently been undertaken to determine the effects of long-practised irrigation on soils in Alberta, more particularly in respect to its influence on their tilth.

From the analysis of a series of silage samples—alfalfa, sweet clover, oat, pea and vetch, and corn—undertaken in connection with experimental work being

carried on by the Division of Field Husbandry, it would appear that the ensiling period did not materially affect the composition of the silage. Alfalfa silages from wilted material possessed a higher protein content than from unwilted, and full bloom alfalfa gave a silage slightly richer in protein than the crop ensiled at the one-tenth bloom stage. The silage from sweet clover cut at bud stage possessed a slightly higher protein content than from the crop cut in full bloom.

As in the past experimental work with fertilizers was carried on at several of the branch Farms and Stations, and additional work was undertaken with a number of new fertilizers which have recently appeared on the market.

The results of the investigations into the merits of the Sugar Jack system of processing dry roughages into moist succulent feed have now been published in bulletin form.

The experiment being conducted by this division to collect Canadian data on the subject of "close grazing system of pasturage" is attracting much attention.

Results obtained so far in connection with the soft pork investigations justify the statement that immaturity and lack of thrift (from whatever cause) are the two chief, perhaps the sole, causes of softness.

In addition to making chemical analyses and physical examinations of insecticides and fungicides appearing on the Canadian market, much co-operative work is carried on with the Entomological Branch.

Division of Botany

In connection with the International Exchange of Seeds 3,366 packets were received and 4,835 packets were sent out. Several enquiries were received relative to the cultivation of Peppermint, and the propagation of plants suitable for feeding muskrats. Bulletin 78, new series, entitled "A Short Guide to Canadian Genera of Seed Plants," was published during the year.

This division renders considerable service to the public in such matters as plant identification, weed and poisonous plant consultation, outside extension work, and the investigation of special problems. Weed surveys conducted for the past five years have fairly well covered the territory from the Atlantic coast to Lake Superior.

The potato inspection and certification service has resulted in larger yields and higher prices for the growers. Up to the end of the calendar year 800,000 bushels of the 1927 crop had been shipped abroad.

The examination of nursery stock of all kinds for admission into Canada has occupied the services of one of the officers at the Central Laboratory almost continuously. Field work in connection with decay in balsam fir was continued in Gaspé.

Potato diseases and problems pertaining to seed potato certification are the major problems under investigation at the Charlottetown and Fredericton laboratories, while the laboratories at Kentville, N.S., St. Catharines, Ont., and Summerland, B.C., are concerned chiefly with the control of diseases affecting orchards and orchard crops. A greenhouse constructed at the St. Anne de la Pocatiere laboratory will greatly facilitate the research work being carried on at that point.

Very satisfactory progress has been made in the investigations being carried on at the Dominion Rust Research Laboratory, Winnipeg. Twenty-six forms of stem rust have been found in Western Canada. The effectiveness of sulphur dusting as a method of rust control has been established beyond doubt.

Root and crown diseases of cereal plants are the major problems under investigation at the Saskatoon laboratory. Here also rust and smut investigations are being carried on in co-operation with other laboratories. In co-opera-

tion with the Plant Breeder of the Department of Field Husbandry, University of Saskatchewan, a study is being made to ascertain the value of plant breeding in controlling crown and root diseases.

Fibre Division

With a favourable season, a good crop and a slight advance in the price of flax the past year was the most encouraging year the Canadian flax growers have experienced since the post-war slump. The acreage is being gradually increased, and the price secured this year for seed for export purposes will no doubt have a stimulating effect on the production of fibre flax in Canada.

Approximately four tons of pedigree fibre flax seed were secured through the Empire Marketing Board, in the spring of 1927, for propagation in Canada. In order to maintain its purity, the six growers in Ontario, amongst whom it was distributed, were not permitted to grow any other variety. Of the resulting crop 1,200 bushels were shipped to Northern Ireland in time for the 1928 seeding, and sufficient seed to sow approximately 1,500 acres still remains in Canada. This will be sown in Western Ontario during the coming season under regulations similar to those enforced in 1927.

The acreage of hemp this year was no greater than that of 1926 due largely to the present unsatisfactory method of scutching. Two machines, designed for scutching hemp, were tested at Ottawa during the past year. One of them is promising.

A new method of harvesting flax which was tried out this year, was found possessing some advantages where ordinary commercial fibre flax seed is sown and where difficulty is experienced in getting flax pulled.

In the matter of yield of fibre per acre a variety of flax known as J.W.S. has demonstrated its superiority over other varieties tested.

Division of Agricultural Bacteriology

This division renders an exceedingly useful service not only to farmers but also to other Farm Divisions and the various branch Farms through the examination and analysis of samples of water from farm wells, milk and milk products, feeding stuffs, preserved food, soils, etc. which are submitted for microbiological testing.

The campaign to encourage the practice of inoculating legumes is being continued. During the past year 3,975 cultures were prepared and sent out, 73 per cent of which were for alfalfa inoculation. Of the reports received from farmers during the year 73 per cent indicated that inoculation had been of benefit.

Particular attention has been directed towards experimental research through the investigation of problems of a bacteriological nature, including bacteriological studies of the milking machine in relation to clean milk production. It is probable that at the end of 1928 the Division will be in a position to make definite recommendations for the benefit of users of milking machines.

With a view to reducing bacterial contamination, a comparison is being made of methods of treating dairy utensils feasible on the average farm where a supply of steam for sterilization is not available. In addition thereto the division has maintained a systematic bacteriological control of the milk supply and pasteurizing system in connection with the dairy at the Central Farm.

Studies of the bacteria concerned with foul brood diseases of bees were continued. Better media for cultivating the organism responsible for American foul brood disease have been devised, thus facilitating its isolation from diseased material. In connection with European foul brood a thorough study is being made of the bacteria found in diseased material.

Studies of fermentation of honey are being conducted in co-operation with the Bee Division.

Tobacco Division

In Ontario and Quebec the spring opened early, and although the growth of seedlings was retarded by the cool weather in May there was an abundant supply of plants for transplanting. The spring season being much more backward in British Columbia there was a scarcity of vigorous plants at transplanting time, and many of the fields were planted late. Damage by cutworms, wireworms and flea beetles was also much more extensive than in the East. Harvesting and curing were accomplished under favourable weather conditions in Ontario and in the Yamaska valley in Quebec, but in the l'Assomption-Montcalm district in Quebec excessive rainfall lessened the yield and lowered the quality. In British Columbia the later sown crops were badly damaged by heavy rains. Late harvesting, unfavourable curing weather and lack of experience on the part of many growers resulted in some heavy losses, but on the whole the crop yield was quite high and of fair quality.

Leaf tobacco exhibits were shown at the Central Canada Exhibition, Ottawa, Sherbrooke Fair, Quebec, Essex County Fair, Leamington, Ont., and in co-operation with the Ontario Department of Agriculture at the Canadian National Exhibition, Toronto.

Members of the divisional staff attended growers' meetings and gave lectures stressing the importance of producing high quality tobacco rather than heavy crops of leaf of indifferent grade. Inspection trips were also made throughout the various tobacco growing districts and information was obtained on the condition of the crop, diseases, insect pests, etc.

Varietal tests were conducted at Fredericton, N.B., Farnham, P.Q., Ottawa and Harrow, Ont., Morden, Man., Swift Current, Sask., and Invermere, Summerland, Kelowna, Agassiz and Saanichton, B.C. At Harrow, Ont. seed beds covered with cello-glass held the moisture well and required less attention than the beds covered with glass or cotton. The plants however, were a little later than those produced under glass but earlier than those produced under cotton. Experiments on seed bed sterilization, and studies on the effect of various cultural practices on the nicotine content of tobacco, were continued at Ottawa. Unfavourable weather interfered with the tobacco work at Morden, Man. Varietal and cultural tests were also conducted in the Okanagan valley, B.C.

The total tobacco crop in 1927 amounted to about 43,916,700 pounds, which is the largest yet produced in Canada. Unfortunately there was considerably more low grade Burley and dark air-cured tobacco produced than the market could absorb, consequently prices were lower than in 1926 and a proportion of the crop remained in the hands of the growers after the buyers had obtained their requirements.

The export market continued to develop, and nearly six million pounds of tobacco were exported to the United Kingdom in 1927. Great caution however must be observed in the matter of future expansion, and more attention given to the production of high quality, well graded leaf of the type demanded by the market.

Bee Division

The crop of honey harvested during the season of 1927 was one of the largest in the history of Canada. Winter losses throughout Ontario and the eastern provinces were comparatively light, but in the west the winter was severe and losses were heavy.

In co-operation with the Division of Horticulture studies have been made with a view of determining the value of honey bees as agents in the cross-pollination of fruits. This year black currant bushes were used in the experiment instead of apple and plum trees as formerly. From the results obtained it would appear that bees are not necessary for the cross-pollination of black currants.

In connection with the work of queen breeding and rearing considerable difficulty was experienced in getting the queens to take their mating flight, due to unfavourable weather conditions.

Italian bees have shown less inclination for swarming than Carnolians and have also produced a much larger amount of honey.

Package bees, obtained from the southern States early in the spring, were united with colonies which came through the winter in a weak condition, but due to unfavourable weather in the spring and early summer no benefit was obtained from the extra bees.

During the season a total of 2,192,680 pounds of honey for export was inspected. There was a decided improvement in the quality of the honey and methods of packing over that of 1926. The exporters report that this inspection service has benefited the export trade.

Samples of honey collected from various parts of Canada have been graded for the purpose of ascertaining the range of colour and quality produced. A number of samples of honey imported into Great Britain were also obtained in order to determine the kinds of honey demanded on that market. These latter samples have been graded and compared with the Canadian samples and definite grades for Canadian honey are now being formulated.

An investigation into the causes and methods of control of fermentation in honey is being conducted in co-operation with the Division of Bacteriology. A study of the causes of granulation has also been started.

The seasonal reminders sent to beekeepers throughout the Dominion on request are becoming increasingly popular and are in great demand.

In addition to the eighteen branch Farm apiaries, there are also a number of small outapiaries which are maintained for special experimental work.

Division of Illustration Stations

The Illustration Stations form a connecting link between the Experimental Farms and Stations and farmers living in districts remote from such institutions. It is through these Illustration Stations that the results of the researches and experiments conducted at the Experimental Farms are carried to the distant farmers. One hundred and sixty such Stations were operated during the past year.

The soils in many of the districts served by these Stations are lacking in fertility, and keen interest is being shown in the illustrations undertaken by the division, comparing the use of chemical fertilizers alone and in conjunction with barnyard manure.

For the past ten years this division has been encouraging the growing of red clover seed on the Illustration Stations in Ontario and Quebec and many of the Stations are now producing a substantial surplus. Similar efforts have also been made in northern Ontario in connection with alsike clover seed with splendid results.

The production of pure seed of suitable varieties is an important phase of the work of the Illustration Stations, and, being in a position to meet the demand for such seed, they are performing an exceedingly useful and profitable service to the respective communities. The sales during the past year amounted to 30,942 bushels of seed grain and 11,892 bushels of seed potatoes.

On the whole there has been a great improvement in the live stock kept on the Illustration Stations particularly on many of the older established stations where good sires and suitable feeds have been used. A number of the operators now have pure-bred accredited herds and are able to supply their neighbours with well bred animals as breeding stock. Improvement has also taken place

in the poultry plants, and in the laying qualities of the flocks, which has been brought about by selection and by the introduction of males bred from high producing females.

During the year the supervisors organized and addressed one hundred and twenty field and public meetings and also assisted at short courses and acted as judges at fairs and ploughing matches.

Division of Extension and Publicity

This division, as its name implies, is concerned with bringing to the attention of farmers and others interested, the activities of the Experimental Farms Branch, and the services of that branch which are available to agriculturists generally. One of the chief means of doing this is through the preparation and presentation of agricultural educational exhibits at fairs and exhibitions. This service is in keen demand and is greatly appreciated by the public. The special work done by the Federal Department of Agriculture in connection with the Agricultural Jubilee which was held at the Royal Winter Fair, Toronto, was supervised by this division.

A bureau of lantern slides is maintained, and ten sets are available without rental charge to all horticultural and agricultural organizations and schools throughout Canada.

During the past year more than two hundred press articles were sent out by this division, in both English and French. In this way seasonal and regional information is presented in simple form to farmers throughout the Dominion and the division gratefully acknowledges the cordial co-operation of the agricultural papers and daily and weekly newspapers in Canada.

There is an increasingly heavy demand for "Seasonable Hints" and an edition of 476,000 copies was necessary to meet requirements in March, 1928. This is an increase of 58,000 copies for the year.

During the past year more than eighty publications were edited in this division, including the annual reports of the various divisions and branch Farms, bulletins, pamphlets, circulars, and revised publications.

A number of small collections of photographs, seeds, fibre, etc., were prepared at the request of various educational institutions for use in connection with their teaching work, and the chief of the division addressed a considerable number of service clubs, horticultural societies and agricultural organizations on the work of the Dominion Experimental Farms.

Other Activities

In addition to the many lines of work already enumerated there are many other activities at the Central Experimental Farm, one of the most important of which is the draughting of plans. In the draughting room, not only are sketches and complete working drawings prepared for new buildings to be erected on the Experimental Farms themselves, but assistance and advice is freely given to farmers on the construction and repair of farm buildings. During the past year thirty-three sets of drawings were prepared, including sketches and complete working drawings, and 900 blue prints were distributed to applicants. Complete drawings and specifications were also prepared for a cattle barn for the Health of Animals Branch, and illustrations of a dehydrator were prepared for the Dehydration Committee. There is also maintained a very useful collection of cost data and photographs of new buildings, and a commencement has been made on the revision of all branch Farm maps.

BRANCH FARMS AND STATIONS

Experimental Station, Charlottetown, P.E.I.

Cold winds in the latter part of April and throughout May retarded early spring growth. Seeding was not general until May 24, but all crops germinated well and July showers induced rapid growth. The weather was favourable during the harvest season, and during the mild weather of the late autumn the roots and corn made strong growth.

The pure-bred Ayrshire bull, Ravenwood Victor—72902—Class A, and five of his daughters and four other cows, qualified in Record of Performance during the past year. Twenty-seven steers used in feeding experiments returned a total profit of $307.27 over all costs of feed. Yorkshire swine are kept for breeding purposes.

Much valuable information has been accumulated from a number of crop rotation experiments which have been in progress since 1912. From the results obtained from co-operative tests carried on throughout the Island, it would appear that the sugar beets produced are quite suitable for the manufacture of sugar.

Cereal breeding work is being carried on in the new greenhouse and some very promising new selections have been obtained. Variety and strain tests of cereals and forage crops were continued. A bulletin by the Dominion Chemist on the "Soils of Prince Edward Island" is now in the hands of the printers. The largely increased use of fertilizers throughout the province, no doubt, is due in a large measure to the fertilizer work which has been carried on at this Station.

In the poultry work efforts are being directed not only towards increasing the production but also the size of the egg. In the ninth Prince Edward Island Egg Laying Contest sixteen birds qualified for registration.

Twenty of the twenty-two colonies of bees which were put away in wintering cases came out strong, but the backward spring of 1927 was unfavourable for the bees.

Excellent work is being done through the twelve Illustration Stations which are supervised by the Charlottetown Experimental Station.

Experimental Fox Ranch, Summerside, P.E.I.

The research work carried on during the past year has yielded some valuable information on the seasonal requirements of silver foxes in captivity. For instance it has been demonstrated that the diet should vary with the seasons, and in this connection it is advisable to divide the year into three periods. Between May 15 and August 15 it appears necessary that the foxes obtain the essentials of green vegetation either by eating the green vegetation itself or by eating the flesh of animals that have been recently feeding on green vegetation. Under these conditions the foxes have shed their fur in a natural and favourable manner. In the latter part of August the foxes begin to put on weight and store up fat in their bodies and from then until the end of October favourable results have been induced by feeding rations containing animal fats and a certain amount of ripe vegetation in the form of whole wheat flour, corn meal, rolled oats, tomatoes, swede turnips, carrots, beets, etc. The vegetables, however, should be reduced to a very fine pulp. There appears to be a change in the requirements of silver foxes about the beginning of November. It has been demonstrated that high meat rations produce very unfavourable results when fed during the early fall months, but from the beginning of November and throughout the winter months a high meat ration has produced very favourable results.

The improper feeding of cows' milk has been the cause of very heavy losses in the silver fox industry. It often causes severe gastric disturbances. In the experimental work which has been conducted very favourable results have been obtained by adding cereals to the milk and feeding finely ground beef tripe at the same time.

It appears probable that the high mortality amongst fox pups is largely due in many cases to a deficiency of the anti-scorbutic vitamin " C " in the rations of breeding foxes during the fall months, which tends to induce later a very severe form of infantile scurvy amongst new-born pups. Very beneficial results have been obtained from feeding lemon juice and orange juice daily to the females nursing the affected pups.

Many other problems are under investigation and much valuable information is being accumulated.

Advice and assistance in many problems connected with the raising of silver foxes in captivity has been freely given to a large number of fox breeders, many of whom have visited the Experimental Fox Ranch. In addition the superintendent has prepared a number of papers which have been published in the official organ of the Canadian Silver Fox Breeders' Association, and in other journals.

Experimental Farm, Nappan, N.S.

Seeding was fairly general towards the end of May. The weather during the growing season, however, was decidedly unfavourable. There was an excess of moisture and crops suffered from lack of proper cultivation. Grain crops were flattened, and fruit trees suffered considerable damage, resulting in a reduction of about forty per cent in the fruit crop. All grain crops were below the average in yield and quality.

The herd of cattle at this Farm includes pure-bred Guernseys, and grades of the Ayrshire and Holstein breeds. Some very interesting cost data are being recorded. The results of the steer-feeding experiments indicate that heavy meal feeding is not economical. Breeding and feeding experiments were continued with the herd of Yorkshire swine, and with a flock of pure-bred Shropshire sheep.

The rod row method of testing varieties and strains of cereals is proving much superior to the larger plots formerly used. In the variety and strain tests of corn, Longfellow and some of the Northwestern Dents continue to give the highest yields. Tests of grasses and clover, sown alone and in combination, were continued.

Northern Spy, Tolman Sweet, Bethel and Duchess apples were the best yielders this year. In spite of the unfavourable weather conditions, the apple crop when harvested was very clean, but scab developed very rapidly after packing.

In the poultry work special attention was given to the pedigree breeding of Barred Rocks. The relative merits of fish meal and beef scrap as protein feeds for poultry are being studied, and a number of feeding tests are under way. A very satisfactory increase in the average production per bird was noticeable in the egg-laying contest.

A comparison is being made of the relative merits of Ephos basic phosphate, Malagash salt, and sulphur and gypsum in the control of potato scab. Different fertilizer formulae for potatoes are also being tested.

Different methods of swarm control are being studied each year in the apiary. The average production per colony was 72·6 pounds of honey.

Experimental Station, Kentville, N.S.

Seeding was general early in May. A much needed rain on July 11 revived the crops which had suffered considerably from lack of precipitation. A heavy wind and rain storm on August 24 caused the grain to lodge badly. This made harvesting difficult and resulted in much loss. Much fruit also was destroyed.

During the past year there has been a marked improvement in type and production in the herd of dual-purpose Shorthorn cattle at this Station. Eighteen cows qualified in Record of Performance. Yorkshire swine are kept and breeding stock was sold to local farmers.

Expectations of an apple crop above the average vanished when on August 24 high winds damaged the trees and materially reduced the yields. A late infection of apple scab from an early infection on the foliage and fruit caused further loss. Plums ran from fair to good and there was an improvement in prices over previous years. The excessive rains damaged strawberries somewhat, but the crop on the whole was fair. Bush fruits and raspberries gave a fair yield only. Cultural and variety tests with vegetables were continued.

Under average soil conditions the strain of Bangholm turnips resistant to club root continues to give excellent results. Sunflowers did very well in the past season, but corn got away to a poor start due to weak vitality in the seed.

Variety tests of oats, barley and wheat were continued but yields were unusually light due to lack of precipitation in June and early July. Heavy rains in August caused the grain to lodge.

Results of experiments covering a period of years indicate that the application of Malagash salt to the soil is of little benefit in increasing crop yields. Tests with Sydney (open hearth) slag and Bessemer slag imported from Europe indicate that the phosphoric acid is more readily available in the latter. Many other fertilizer tests are under way.

The growth of flax for fibre was checked by the dry conditions of June and early July, but hemp did well and gave a good yield of fibre of fair quality.

A very satisfactory year was experienced in the poultry contest work. The 200 hens returned a profit of $621.35 over feed costs.

Different types of hives were tested in the apiary, the best returns being obtained from the ten-frame Jumbo.

In tests conducted on the fourteen Illustration Stations which are supervised from this Station it has been demonstrated that a lack of phosphoric acid is responsible in many cases for poor yields.

Experimental Station, Fredericton, N.B.

Ploughing was begun much earlier than usual but seeding was not general until June. With timely rains during June, July and August, hay, grain and fodder crops except corn made a splendid growth, and pastures were good until fall. Unsettled weather delayed harvesting operations, and the grain was late ripening and badly filled. Hay and roots were good crops, but the corn was rather immature when cut. Weather conditions during August and September favoured the spread of potato blight.

The dairy herd at this Station consists of Ayrshires, Holsteins, and dual purpose Shorthorns. A number of bull calves from cows with creditable milk records have been sold to farmers. By careful breeding improvement is being effected in the pure-bred stock. Some interesting feeding experiments are under way. There is also an exceptionally fine flock of Shropshire sheep at this Station. The best of the ram lambs were sold for breeding purposes. Young breeding stock from the herd of pure-bred Yorkshire swine is in great demand all over the province.

In addition to crop rotation, manure and fertilizer experiments, tests are also being made of different rates and dates of sowing oats, rates of sowing wheat, and planting corn in hills versus drills.

Cultural, spraying, variety and fertilizer experiments are in progress in the orchard, and efforts are being directed towards obtaining a desirable winter apple for New Brunswick conditions. Experiments have also been undertaken to determine the feasibility of growing vegetables for canning purposes in New Brunswick. The production of disease-free stock was the principal line of potato work.

Rod-row tests of varieties and strains of cereals were continued. The Fredericton District Co-operative Seed Growers' Association with headquarters at the Fredericton Experimental Station is performing a very useful service by distributing clean home-grown registered seed, and by operating a custom seed cleaning plant for the benefit of local farmers.

The fertilizer experiments are of prime importance in view of the extent to which fertilizers are used in the province. Considerable work along this line is now under way.

Forty-eight birds qualified for registration in the seventh New Brunswick Egg Laying Contest. A study is being made of the results of breeding upon the size of eggs.

Experiments have clearly demonstrated the superiority of Canadian clover seed over clover seed imported from southern Europe. A hybrid corn has been produced by crossing Twitchells Pride with Wisconsin 7. At the Fredericton Station this hybrid for the past three years has given a yield about equal to that of Wisconsin 7, but has been decidedly earlier.

The commercial possibilities of the flax crop are being studied and some tests with hemp were also conducted. Some interesting and very useful experimental work was carried on in the apiary. The eighteen Illustration Stations supervised from this Station not only illustrate the best farm practices, but also serve as centres for the distribution of seed grain and potatoes, as well as pure-bred poultry and live stock.

Experimental Station, Ste. Anne de la Pocatiere, P.Q.

Spring opened up a little earlier than usual but cold wet weather during the latter part of April made it difficult to work the land. Seeding on drained land was accomplished early in May. A period of drought in June was followed by an abundance of well distributed rain in July. Harvesting was done under favourable conditions. The grain crop was good, hay was above the average, while the root crop was one of the largest ever harvested. It was a poor year for corn, but the potato and fruit crops were excellent.

The breeding of Percheron horses at this Station has been somewhat handicapped by the lack of a first-class stallion. Recently however, an outstanding three-year old stallion, Chacal (12951) (165185) was imported from the famous Percheron district of Nogent-le-Rotrou, France. This horse should have a very appreciable influence in raising the standard of breeding in this district. The herd of pure-bred Ayrshire cattle is now headed by two class A.A. bulls, Ste. Anne Lord Kyle 12th (97949) and Ottawa Supreme 28th. In addition to carrying on breeding and feeding experiments, young bulls of good breeding are sold to local farmers. The results of five years' experiments show that a Leicester-Shropshire cross is very satisfactory for mutton production. Breeding and feeding experiments were also carried on with a herd of Yorkshire swine.

Rotation experiments, tests of fertilizers versus manure, and the usual variety tests of cereals and forage crops were continued. Farmers in this dis-

trict would be in a better position to supply their live stock with a balanced succulent ration if they produced more roots, peas and oats and vetches. Registered seed grain was produced and made available to farmers. The flax growing industry was stimulated by the installation of a scutching plant at this Station, and the use of better seed, and the adoption of improved methods of culture and retting have resulted in a larger yield of fibre.

This seasons's apple crop was the largest to date. The Melba, Loba, Sandaw, and Bruna are very promising varieties. Over 4,000 scions of the leading varieties of apples were distributed during the year. Variety, cultural and spraying experiments were carried on with small fruits, vegetables and potatoes.

Fertilizers used alone and in combination are being tested on a four-year rotation of swede turnips, barley, clover and timothy or mixed hay.

Barred Plymouth Rocks are the only breed of poultry kept. Pedigree breeding has resulted in a large increase in egg production. Considerable experimental work is being carried on and cockerels, pullets and hatching eggs are sold to farmers at reasonable prices. In the egg laying contest 13 birds qualified for registration.

In spite of cool weather in the spring and early summer honey production was up to the average. The twenty Illustration Stations supervised from this Station are doing excellent work.

Experimental Station, Cap Rouge, P.Q.

There was less sunshine, greater precipitation and somewhat colder weather during the growing season of 1927 than the average for the past fifteen years. The crops on the whole were good.

Experimental work in the breeding, feeding, housing and management of pure-bred French Canadian horses is carried on at the St. Joachim Horse Farm which is under the direction of the Superintendent of the Cap Rouge Experimental Station. From 1922 to 1926 horses bred and reared at this Station have won more than 400 prizes in the show-ring. At Cap Rouge there is an exceptionally fine herd of French-Canadian cattle which is fully accredited, and with which experimental work is carried on. There is also a herd of Yorkshire swine from which breeding stock is sold to farmers.

In field husbandry, soil management and the relative value of different crop rotations are being studied. Crop production costs are also recorded.

Variety and cultural tests and the breeding of fruits and vegetables are also carried on. Extensive tests have also been made with a considerable number of varieties and strains of trees, shrubs, herbaceous perennials, annuals, tubers and bulbs.

Some fine selections have been made of Manchurian barley, Huron wheat and Banner oats, and work is now being carried on with Arthur peas and Solo peas. A number of very useful fertilizer experiments are also under way.

Variety and strain tests of forage crops are in progress. Some breeding work has also been started.

The pedigree breeding of Barred Rocks is the chief line of poultry work, but feeding, housing and management experiments are also being carried on. Cockerels for breeding purposes and day-old chicks as foundation stock are sold to local farmers.

Experimental Station, Lennoxville, P.Q.

The first seeding was done on April 19, but growth was retarded by the cold wet weather during May and June. Hay was an excellent crop, though late. Grain, root and potato crops were good and pastures were in splendid shape throughout the season.

Included in the dual-purpose Shorthorn herd at this Station are twelve promising daughters of the bull "Wellwood Lassie's Lad." At this Station also there are dairy herds of Ayrshires and Jerseys, from which fourteen bull calves were sold during the past year for breeding purposes. Ninety-one stockers were fed during the winter. Some cross breeding work with sheep is being carried on to ascertain the value of different crosses in the matter of quality and finish of market lambs. Experiments in feeding for bacon production are being carried on with a herd of Yorkshire swine.

Rotation, cultural and fertilizer tests are in progress, and the cost of producing various crops is being recorded. Thirteen acres of land are devoted to forage crop experiments, which include variety tests, and some breeding work with a variety each of mangels and swede turnips. Attention is also being given to grain mixtures for ensilage. Breeding work is in progress with oats and fall wheat. In addition to the regular variety tests of forage crops and cereals a special series of variety tests is being conducted in co-operation with the Quebec Provincial Seed Board. Included in this special series of tests are corn, mangels, swede turnips, oats, barley, wheat, peas and beans.

Variety and cultural tests of vegetables and variety tests of strawberries, bush fruits, plums and apples are also under way, and co-operative experiments in commercial apple orchards at Abbotsford and Chateauguay are supervised from this Station.

Hemp has given large yields of good fibre in each of the five years it has been under test, but flax for fibre has not given such satisfactory results. The yields have been large but the fibre has been of poor quality.

Forty-nine birds qualified for registration, in the fifth Quebec Western Egg Laying Contest. Barred Rock hen No. C.H. 188 made a remarkably fine showing, laying 305 eggs in 365 days. Particular attention is being given to the selection of hens having good production with satisfactory egg size.

In the apiary a study is being made of methods of swarm control, outdoor and indoor wintering and sources of nectar, and a comparison is being made of different types of hives.

Experimental Station, Farnham, P.Q.

The weather during April and May was favourable for the production of good tobacco seedlings. Transplanting, however, was not general until the first week in June. Precipitation was well distributed throughout the growing season. Harvesting and curing were done under very favourable weather conditions. The crop was the heaviest since 1920.

In the matter of tobacco seed bed sanitation, tests are being made of the relative efficiency of a number of dust disinfectants. Formalin has given the most satisfactory results so far. Experiments, which have been conducted to determine the effect of manure, fertilizers and lime on the yield and quality of tobacco, have shown that lime is harmful when used alone or in combination with manure or manure and fertilizers. The use of fertilizers, however, increases the yield of tobacco and is profitable. Slightly larger yields have been obtained from level cultivation than from ridging. In tests comparing the relative efficiency of drilling versus broadcasting fertilizers for growing tobacco the best results have been obtained when the fertilizers are spread in the rows and well mixed with the soil. This year on the plots fertilized with spent hops and yeast the tobacco matured slightly faster than on the plots which had received manure or manure and fertilizers. The crop, however, was slightly over-ripe when harvested, which may account for the poor quality of the leaves produced by the spent hops and yeast. Further studies have been made of the effect of the preceding crop on the subsequent growth of tobacco. Different crop rotations are also being studied.

Connecticut Havana No. 142 A3X (Resistant Havana) continues to be the most promising strain of cigar binder tobacco for the Yamaska valley. Of the seven varieties or strains of cigar fillers tested in 1927, the most promising are the Spanish Kendig and the Little Dutch Ragondorf.

Two field days were held at the Station during the season and were well attended. Addresses were also given before farmers' clubs and tobacco growers' associations at different points. Very useful demonstrations of tobacco seed bed disinfection were staged at St. Cesaire.

Tobacco fields in several parishes were inspected and although wild fire was present on several farms the damage was much less severe than in 1925 and 1926.

Different varieties of tomatoes, beans, peas and sweet corn were grown to test their suitability for canning purposes.

During the year a small cattle barn was erected and small herd of dairy cattle of the Ayrshire breed has been established at this Station.

Experimental Station, La Ferme, P.Q.

The growing season was somewhat cooler than the average for the last ten years, but precipitation was higher and was spread over a longer period. The number of hours of sunshine was about average but during the month of August there was less than usual.

Six pure-bred French-Canadian horses are kept at this Station for breeding purposes. There is also a dairy herd of Ayrshire cattle, pure-breds and grades, with which experimental work is carried on. Several registered bulls were sold during the past year to farmers in the district. Breeding and other experimental work is carried on with a flock of Cheviot sheep. The herd of Yorkshire swine is headed by the boar Kapuskasing Wonder, 625-122297. Twenty-eight head were sold for breeding purposes during the year.

A number of field husbandry experiments are being conducted, including various crop rotations, a comparison between ensilage crops and field roots, and a surface drainage experiment. The forage crops under test are field roots, sunflowers, corn, clover, timothy and alfalfa, grass mixtures for hay and cereal mixtures for annual hay. Comparisons are based on the absolute dry matter yield. Different varieties of flax have also been tested with excellent results, but tests with hemp have not been very encouraging.

Cereal work has been enlarged by the addition of rod-row tests.

Valuable data have been acquired from the various fertilizer experiments carried on at this Station.

Vegetables, small fruits, tree fruits, and ornamental plants and shrubs are being tested in order to determine the kinds and varieties best suited to this district. Cultural experiments are also being carried on.

The pedigree breeding work with poultry which has been under way since 1924 has resulted in a very substantial increase in the average production per bird. Careful studies are being made on the subject of incubation and a number of feeding trials have been conducted.

It is hoped to increase the size of the apiary and to undertake experimental work with bees. Several Illustration Stations have been established in the district.

Experimental Station, Kapuskasing, Ont.

The season opened up quite early and on May 7 several acres of wheat and oats were seeded. Germination was good but growth was rather slow until well on in June owing to cool weather. Precipitation during the growing season was about average, and crops on the whole grew remarkably well. The grain crop

was particularly good, but hay, especially new meadows, suffered to some extent from a dry period the latter part of June and early in July. Wet weather made it difficult to cut and cure the hay and grain.

The cattle at this Station consist of pure-bred Ayrshires and Shorthorns and grades of these two breeds. Some interesting feeding experiments have been conducted and cost data have been recorded. A flock of registered Shropshire sheep and a herd of registered Yorkshire swine are kept, with which experimental work is carried on. Breeding stock is sold to settlers.

Field husbandry work consists of crop rotation and cultural experiments. Most of the crop rotation experiments have covered at least one complete cycle and much valuable information has been accumulated. A comparison is also being made of the effect of corn, sunflowers, turnips and oats, peas and vetch on the crop following.

Forage crops experiments are an important line of work at this Station, and include not only variety tests but also tests of rates and dates of seeding, and a comparison of different methods of seeding. Much useful experimental work is being carried on with different fertilizers. Experiments with flax and hemp are also under way. Horticultural work consisted of variety tests with raspberries, gooseberries and all the common vegetables, as well as various cultural tests.

The Barred Plymouth Rock breed of poultry seems to be particularly well suited to this locality. During the past year hatching eggs, day-old chicks, and cockerels were supplied to settlers, from the Farm flock. Considerable experimental work is being carried on.

The past season was not particularly favourable from the beekeepers' point of view. The honey crop was not as large as usual, and only twenty-seven queens were successfully mated. Eight Illustration Stations are now supervised from this Station.

Experimental Station, Harrow, Ont.

The season opened up a little earlier than usual and it was possible to prepare and sow tobacco seed beds during the latter part of March and the first week in April. The transplanting of tobacco plants began on May 20. The corn crop was poor and was further damaged by the corn borer. Conditions were splendid for the harvesting and curing of the tobacco crop.

The experimental work covers practically every phase of tobacco culture, etc., which would be of value to the growers. The types of tobacco grown this year were White Burley, Green River and flue cured, and good yields of leaf of excellent quality were obtained. Burley and Green River were sold at twenty-two cents and the flue cured at thirty-two cents per pound. Over a period of eleven years the semi-hot glass-covered tobacco plant beds have proved superior to all other types of plant beds tested. The use of manure and commercial fertilizer on all types of tobacco proved profitable. The relative merits of drilling versus broadcasting commercial fertilizers for the tobacco crop have been under test for eleven years, and in seven of the eleven years the results have been in favour of drilling. Splitting the stalk when harvesting the tobacco has resulted in a quicker and brighter cured leaf and less shed burn.

Steer feeding experiments were again carried on in order to determine if it is profitable to produce beef by winter feeding.

The usual variety tests of cereals and forage crops were continued and a quantity of registered Banner seed oats was produced.

Substantially larger profits have been obtained from the tobacco crops in the four and five-year rotations than from the continuous planting of tobacco.

Of the six varieties of hemp tested for seed production Raccolta C.D. No. 19 gave best results, producing 18 bushels of seed per acre.

All varieties of early tomatoes yielded well, particularly several strains of Alacrity x Hipper. The use of fertilizer for the potato crop proved very profitable.

Experimental Station, Morden, Man.

Seeding was greatly delayed on account of wet weather with the result that many farmers seeded only about three-fourths of their usual acreage to wheat. Growth during the early summer was quite rapid but stem rust developed and caused considerable damage to wheat and oats. It was a favourable season for pastures, hay crops, berries, ornamental plants and most vegetables.

The herd of Ayrshire cattle at this Station is fully accredited and all the cows are entered in the Record of Performance test. A much needed new dairy barn has been constructed. There is also a flock of registered Hampshire sheep and the demand for ram lambs for breeding purposes has been very keen.

A study of the influence of cultural practices in the control of root rots in wheat is being carried on in co-operation with the Division of Botany. Some interesting information upon the cost of producing crops is being obtained from the five different crop rotations in operation at this Station.

During the past year controlled fruit breeding was continued on an enlarged scale with apples, plums, cherries, raspberries and strawberries. Further plantings were made in the trial orchards. In the seedling apple orchard 57 trees were selected as showing special promise. Those seedlings which prove their adaptability and worth will be propagated and made available through the commercial nurseries to the general public. There are also some promising plum seedlings and it is hoped that soon there will be some new varieties which will combine good quality, general hardiness and early maturity. Some comparatively tender varieties of tea and hybrid perpetual roses are doing remarkably well in the rose garden. Rose breeding is carried on on quite a large scale. There are now 226 different named sorts of trees and shrubs in the arboretum.

Varieties of common and durum wheats, oats, barley and peas were tested in rod rows. Grimm and Baltic alfalfa seem particularly well adapted to this locality. A strain of North Western Dent field corn selected at this Station yielded 43·21 bushels of clean seed per acre.

Pedigree breeding and experimental work is carried on with a flock of Single Comb Rhode Island Reds.

Good results were obtained in the apiary. An over-wintered colony produced 397 pounds of extracted honey.

A commercial plantation of 4⅛ acres of tobacco yielded a fair crop of leaf in spite of adverse weather conditions.

Experimental Farm, Brandon, Man.

The season was late opening and seeding was further delayed by wet weather. The Assiniboine river flooded about 200 acres on the Farm and half of this area did not dry off in time to be cropped. Hay was a heavy crop and corn did well in the latter part of the season. Excessive moisture and rust lessened the yields of grain.

Fourteen cows in the dual-purpose Shorthorn herd at this Farm have Record of Performance certificates and eleven others are now entered in the test. Substantial improvement has been effected in the milking qualities of this herd. Breeding and feeding are the two principal lines of investigational work. A herd of Yorkshire swine is maintained and breeding stock is sold to farmers. Efforts are being directed towards improving the bacon type of hog. Experimental work is also carried on with a flock of Oxford Down sheep and grades of the same breeding.

Crop rotation and cultural experiments, and tests with manures and fertilizers have yielded a considerable amount of valuable information, especially in the treatment of summer-fallows.

In addition to the regular rod row tests of cereals the production of Elite Stock seed of some of the registerable varieties is under way. There are now on hand more than 100 pure line selections of wheat which have shown a high degree of rust resistance, and these will be given a milling and baking test.

Particular attention has been given to the improvement of corn as fodder. The cool wet spring served to demonstrate very clearly the marked superiority in the matter of germination at low temperatures of seed of northern grown origin over that received from the corn growing States of the Union.

Variety tests with vegetables have been carried on at this Farm since 1890 and unsatisfactory varieties have been eliminated. Poultry breeding work is carried on with a flock of Barred Plymouth Rocks with particular attention given to the development of production and weight of eggs while at the same time maintaining the character of the breed in respect to colour, body weight and type. In the recent Manitoba Egg Laying Contest 62 birds qualified for registration.

Co-operative tests with cereals, corn and alfalfa are being conducted amongst farmers in order to obtain information as to the most suitable varieties for different districts.

Experimental Farm, Indian Head, Sask.

The season opened very promisingly and wheat seeding commenced on April 27, but a severe hailstorm on July 9 and a heavy infestation of rust caused heavy losses.

Breeding and experimental work is carried on with Clydesdale horses. The regular feeding of potassium iodide and the use of vaccines during pregnancy appear to be beneficial in the control of navel ill. Horses from this Farm were successful in competition at the Toronto Royal and Chicago International shows. "Lady Price" was made Grand Champion at Chicago. The beef cattle at this Farm are Shorthorns while the dairy herd is composed of Ayrshires. Records of feed, milk production and cost of raising heifers are kept. There are also herds of pure-bred Shropshire sheep and pure-bred Yorkshire swine. Breeding stock is in demand.

Crop rotations designed to meet the requirements of the grain and diversified farmer have been under investigation for the past fifteen years, and much valuable information has been obtained. A study is also being made of summer-fallow substitutes, summer-fallow treatment, and dates and methods of seeding various crops. Marquis continues its leadership among the wheat varieties, while MacKay is the leading variety of pea. Banner and Victory oats are the most satisfactory for average conditions.

Hay and pasture crops did very well. There was practically no winter killing of grasses and clovers. Northwestern Dent corn produced a very high yield of ensilage.

It was an unfavourable season for horticultural crops. Considerable damage was done by the severe hailstorm on July 9 and unfavourable weather in September interfered with the normal ripening and harvesting of the crops. In addition to the usual variety tests of fruits, vegetables and flowers some selection and breeding work was carried on. A new greenhouse has been erected which will greatly facilitate experimental and research work.

A successful hatching season was experienced in the poultry plant. Steady improvement is being effected in the flock of White Wyandottes by the use of vigorous male birds from dams with high production records. The eighth Saskatchewan Egg Laying Contest was conducted in the new contest house. Sixty-one birds qualified for registration.

Experimental Station, Rosthern, Sask.

The abundance of moisture during the season of 1927 produced a wonderful growth of fodder and garden crops, but it also favoured an epidemic of rust, delayed threshing, and depreciated the quality of the grain.

An excellent herd of dairy cattle has been developed from two Holstein-Friesian heifer calves purchased in 1914. One of the twelve cows which completed lactation periods during 1927, R.E.S. Johanna Keyes Lass, produced 19,647 pounds of milk testing 3·65 per cent butter fat. Lambs resulting from crossing a Suffolk ram on grade Leicester ewes averaged 12 pounds heavier than grade Leicester lambs of the same age. Feeding and breeding experiments are carried on with Yorkshire, Tamworth and Berkshire swine and their crosses.

Crop rotation and cultural experiments were continued. Of the different varieties of wheats tested Marquis and Garnet have given the highest average yield over a six year period. Due to the abundant precipitation alfalfa yielded two cuttings of from 1½ to 2½ tons per acre instead of the usual small single cutting. Western rye grass and awnless brome grasses also did well.

In addition to the usual variety tests of fruits and vegetables some breeding work was started. Several thousand plum and apple seedlings have been planted on which to bud some of the more promising varieties.

Satisfactory progress is being made in the poultry work, which is confined to Barred Plymouth Rocks. There has been a steady improvement in egg size and in the number of eggs laid.

There are 47 colonies of bees in the apiary and for the past 3 years the bees have been wintered outside without loss, but for several years there have been heavy losses during the months of May, June, and part of July, from some unknown cause.

Experimental Station, Scott, Sask.

The spring season was rather backward and seeding was not general until May 9. Sunshine during May was much less than usual, and the weather remained cool throughout June. July was an ideal month, but a frost on August 8 did considerable damage. Rust also was severe, and adverse weather conditions delayed the completion of threshing operations.

Breeding and feeding experiments were continued with the herd of pure-bred Shorthorn cattle at this station, and in addition twenty steers were carried on a feeding test. Grading up experiments are being conducted with flocks of Shropshire, Cheviot and Rambouillet sheep, by the use of pure-bred sires. The feeding of one per cent potassium iodide in the salt to ewes during the gestation period appears to have been effective in controlling goitre. Breeding and feeding experiments were also conducted with a herd of Yorkshire swine, and a number of head of breeding stock were sold to farmers.

Crop rotation experiments occupy an area of approximately 200 acres and include straight grain crops, grain with hay and pasture crops, and grain with hay and summer-fallow substitutes. Nine separate cultural experiments are also in progress.

All cereal tests are carried out on summer-fallow land. The testing of new selections and the purity of different varieties is done in head rows. Elite stock seed of Marquis 10 B and Early Red Fife was produced and is being multiplied for sale in limited quantities as first generation seed. Local variety tests were undertaken in co-operation with farmers throughout Northwestern Saskatchewan, with a view to determining the varieties best suited to the various districts.

Forage crops work consists largely of testing varieties and strains for hardiness, yield, and drought resistance under Northwestern Saskatchewan conditions.

Very satisfactory progress has been made in the poultry work. All birds retained for breeding purposes and all cockerels and pullets sold to farmers were blood tested for the bacillus of white diarrhœa.

The season was not favourable for honey production. The highest yield from one colony was 86 pounds.

Experimental Station, Swift Current, Sask.

Wheat seeding commenced in April but on account of unfavourable weather was not finished until early in June. The season on the whole was cooler and the rainfall was greater than the average. Frost, rust, and unfavourable harvesting weather adversely affected the yield and grade of wheat.

Herds of Shorthorn and Holstein cattle and Tamworth swine are maintained, and breeding stock is sold to farmers.

A good deal of study has been given to the adaptability of various farm implements, especially the combined harvester-thresher, in regard to which much useful information has been obtained. The regular crop rotation and cultural experiments were continued.

The cereal work has not only been enlarged, but the more extensive replication of rod-row tests has resulted in greater accuracy, and the work has been facilitated by the increased use of specially devised machinery for cereal investigation work.

Experimental results over a period of years indicate that forage crops fluctuate more widely in yield from season to season than do cereal crops. This year the corn crop was so badly damaged by frost as to be practically worthless, but practically all other forage crops did very well.

There was an unusually good growth of ornamental trees and shrubs and the appearance of the grounds has been greatly improved. Bush fruits also did well but many of the trees in the fruit plantation died during the winter.

Additional accommodation has been provided for the poultry work by the construction of another laying house and an incubator room. The standard of the flock has been much improved, egg production was increased, and there was a keener demand for breeding stock.

Experimental Station, Lethbridge, Alta.

In spite of the fact that abnormal weather conditions seriously delayed seeding operations, the ample precipitation during the summer produced heavy crops of all kinds. Alfalfa and sugar beets were about the only crops on which irrigation water was used in this district during the growing season. Stormy weather in the fall delayed threshing operations which were not completed until spring. Many acres of sugar beets were left undug owing to the early freeze-up.

Two systems of farming are being carried on at this Station, irrigated and dry, not with the object of comparing the relative merits of the two systems, but rather to study their individual problems. Much useful information has been obtained from the rotation and cultural experiments which have been under way on both areas for a number of years. The effect of irrigation water on the physical and chemical conditions of the soil are being studied. Data from five years' experiments in the use of irrigation water are now being compiled for publication.

Included in the cereal variety tests were wheat, oats, barley, beans and peas. Except in the case of the older and more important varieties these tests are conducted in rod rows. Registered Marquis wheat was grown on part of the dry area and was sold to farmers in the district as registered seed. The best time of seeding and the most practical method of retting hemp are problems which are being studied.

Comparative tests were conducted on both dry and irrigated land with different varieties of corn, swede turnips, mangels, sugar beets, carrots, grasses and clovers, and selections were made of Northwestern Dent corn and a few other varieties with a view to developing strains better adapted to local conditions for grain and for "hogging off."

A constructive breeding policy is being carried on with a stud of Percheron horses. In co-operation with the Health of Animals Branch a study is being made of contagious abortion in cattle. The Station herd of pure-bred Holsteins at present is negative to abortion Bacillus of Bang. Steer and lamb feeding trials are also under way. It has been demonstrated that the cheap straw shed and the portable cabin, when coupled with proper feeding, are quite suitable for winter hog production.

The apple crop was exceptionally good. Bush fruits also were good but plums were a failure. The usual varietal and cultural experiments with vegetables were continued.

The Alberta Egg Laying Contest, conducted at this Station, is proving a valuable aid to the poultrymen of the province. Breeding work is carried on with a flock of Barred Plymouth Rocks which is now recognized as an excellent source of foundation breeding stock.

An experimental apiary of about 100 colonies serves as a valuable aid to the beekeeping industry in southern Alberta which is increasing in importance each year.

Experimental Station, Lacombe, Alta.

The spring season was backward and cool. Frequent showers and warm temperatures during June and July were interspersed with bad hail storms. Some of the late-seeded, late-maturing varieties were damaged by fall frosts. In spite of these conditions one of the heaviest crops ever produced in Central Alberta was harvested and threshed in fair condition with excellent weather prevailing.

Horse breeding is carried on with pure-bred Shires and Clydesdales. The imported Shire stallion "Snelston Topper" (1608) (38528) has done excellent service. His colts give every indication of developing into good big drafters. A herd of pure-bred Aberdeen Angus cattle is also maintained, from which breeding stock is supplied to farmers at reasonable prices. There is also an excellent dairy herd of Holsteins. One of the herd sires is in Class XX and another in Class X, while all the young bulls old enough for inspection are in class X. The entire herd of females of milking age successfully passed the Advanced Registration Inspection. Both herds are fully accredited. Breeding and feeding experiments are conducted with herds of Yorkshire, Tamworth and Berkshire swine.

Results obtained from the crop rotation experiments indicate that the early maturing varieties of wheat are the most profitable crop for central Alberta. The conservation of soil moisture is of the utmost importance in crop production.

Cereal work is one of the major activities at this Station. During the past season some 150 named wheat varieties and 740 pure line wheat selections were tested. In most cases in the district served by this Station Garnet wheat gave higher yields and graded higher than other sorts grown on the same farm.

A mixture of different legumes when grown in combination with different grasses produces a large crop of more palatable hay than either the legumes or grasses seeded alone. The advisability of including sunflowers or corn as part of the crop produced for ensilage purposes has been demonstrated.

The horticultural work at this Station is attracting a great deal of attention. The usual varietal and cultural tests were conducted. Poultry breeding work with a flock of White Wyandottes aims at increasing egg production and the size of eggs, together with good breed type, fertility, and hatchability.

In the apiary Italian bees have given better results than Caucasians and Carnolians. The highest yield of extracted honey from one colony was 210 pounds.

Experimental Sub-station, Beaverlodge, Alta.

Although spring opened somewhat later than usual, there was ample moisture, and excellent crops were harvested throughout the Upper Peace district.

In addition to the regular rod row tests of varieties and strains of cereals, some of the more suitable sorts were submitted to further tests in sextuplicate drilled plots under conditions representing field culture as closely as can be obtained in plot work. The yields were very gratifying. While there was little or no snow covering the ground, low temperatures resulted in an unusual degree of injury to winter wheat. The yield of Marquis wheat has averaged 36 bushels 43 pounds per acre over a thirteen year period, while the twelve-year average for Victory oats is 89 bushels 18 pounds and for O.A.C. 21 barley 41 bushels 19 pounds. It is worthy of note that no rust whatever was found on commercial grain crops, but on a few susceptible varieties purposely sown late a very few rust pustules were found on wheat in September.

Good yields of hay were obtained but new seedings of clovers were completely winter killed. New seeded grasses also sustained severe injury with the exception of western rye, brome and timothy. Alfalfa and clover protected with a good top came through fairly well, but there was considerable killing of alfalfa where the aftermath had been removed.

The effect of topography upon minimum temperature occurrence is being studied. By the use of a hygro-thermograph it is hoped to determine whether the exceptional dryness of atmosphere is responsible for the phenomenally wide spreads in temperature in this region. Marked differences have been noted between two points half a mile apart with a difference of 107 feet in elevation.

Fruits and vegetables again did well. Many kinds of flowering shrubs and perennials succeed, and there seems to be no limit to suitable annuals.

A long winter without snow banking, followed by a lingering spring, was largely responsible for the heavy loss of bees wintered out doors in cases.

Experimental Station, Summerland, B.C.

Precipitation during the season of 1927 was much greater than usual, and there was an ample supply of irrigation water. Alfalfa, roots, tomatoes, melons and tobacco suffered from the excessive moisture, but the fruit crop was good both as to quality and quantity.

The herd of Jersey cattle made a very creditable showing and again successfully passed the annual Accreditation Test. The flock of Cheviot sheep was disposed of because of lack of proper pasture and other accommodation. Very satisfactory progress has been made in the breeding of an improved bacon type hog of the Berkshire breed. Several brood sows and gilts, and one boar from the Berkshire herd at this Station were exported to New Zealand.

Investigational work on the storage and handling of apples was continued. It is worthy of note that those growers who followed the recommendations made as the result of investigational work carried on at this Station suffered comparatively little loss from Jonathan break-down. Further work is being done on this problem. Good progress has been made in the breeding of hardy resistant root stocks, and new varieties of fruit. The breeding of select strains of tomatoes and cantaloupes has been very successful. The usual variety tests of vegetables were continued, as was also the work with fertilizers. New lawns and shrubberies have been developed and aster breeding is being carried on. The new greenhouse which has been erected will greatly facilitate the horticultural work.

An excellent crop of good quality tobacco leaf was produced at the Station. Much valuable information has been obtained from the varietal and cultural experiments which have been conducted, but in order to meet the increasingly heavy demand for reliable information on the subject of tobacco culture, under irrigation, the work is being expanded.

Experimental Station, Invermere, B.C.

Spring seeding conditions were ideal and germination was above the average. Growth, however, was slow until late in June. There was an abundant first crop of hay and it was harvested in good condition, but part of the second crop had to be ensiled due to the wet weather.

Included in the fourteen head of horses at this Station are a registered Clydesdale stallion and three registered mares. Three filly foals were reared during the year.

The herd of Ayrshire cattle is headed by the bull Ottawa Lord Kyle 22. His calves show promise of developing into good individuals. This is an accredited herd, and all animals as they freshened during the past year were entered under Record of Performance. The Station is meeting a steady demand for Yorkshire swine for breeding purposes. There is also the nucleus of a flock of Hampshire sheep.

Crop rotations of from three to ten years' duration are under way. The outstanding crops in these rotations are alfalfa, peas and potatoes.

Cereal work consisted of rod-row variety tests of oats, barley, wheat and field peas.

The forage crops variety tests included alfalfa, clover, grasses, mangels, turnips, carrots, sugar beets, corn and sunflowers.

Varietal and cultural tests of fruits, vegetables and flowers were conducted, and an apple orchard of 300 trees was set out at Windermere. Considerable attention is being given to work with peas and potatoes. A fairly extensive fertilizer test is also under way.

Excellent progress has been made in the poultry work during the past year. In the matter of egg production the general flock average was good, and four hundred well developed pullets which were placed in the laying house late in October, are doing splendidly.

The past year was a fairly successful one in the apiary and the bees went into winter quarters in good shape.

On the Windermere area a number of hedges and shade trees were planted and the ground has been prepared for general experimental work.

Experimental Farm, Agassiz, B.C.

Weather conditions during the past season were not conducive to heavy crop yields. The fruit crop was poor, grain yields were below the average, potatoes were injured by frost, and corn did not mature well.

With the exception of one gelding and a pony all the horses at this Farm are pure-bred Clydesdales and most of them were bred on the Farm. Eight horses exhibited at the Vancouver Winter Fair did exceptionally well in strong competition. Representatives from the herd of pure-herd Holstein cattle were exhibited at New Westminster and at the Royal Winter Fair, Toronto, and gave a good account of themselves. Some interesting data have been secured on blood testing of dairy cattle for abortion. The 1927 wool clip from the flock of Dorset sheep averaged 8·58 pounds per fleece. Lambing results were quite satisfactory. Breeding and feeding experiments are carried on with a herd of Yorkshire swine.

The rod row system of testing cereals is employed at this Farm. Forage crops under test include corn, sunflowers, mangels, carrots, sugar beets and annual hays. Satisfactory results have been obtained from a four-year rotation of hoed crop, grain, hay and pasture. Hemp made a good growth but owing to adverse weather conditions the seed did not mature. Flax for fibre, sown on May 28, gave higher yields than were obtained from earlier seedings. Tobacco grew well, but wet weather hampered harvesting operations with the result that the crop became overripe, and considerable damage was done to the leaves by wind.

Varietal and cultural tests of vegetables, fruits and flowers were continued. A start has been made on the production of Scarlet Runner beans, Daisy peas, and Early Flat Egyptian beet. A much needed new horticultural building has been erected.

Barred Plymouth Rocks are the only breed of poultry kept. Breeding and hatching results were excellent this season. In the Egg Laying Contest production was not as high as in the two previous years, but four birds passed the 300 egg mark.

In the apiary efforts are being directed towards enlargement, and experimental work was temporarily suspended.

Experimental Station, Saanichton, B.C.

During the spring season, which opened somewhat later than usual, the rainfall was below the average. Autumnal rains, however, were early and excessive. This year's hay crop was perhaps the best yet harvested on the Saanich peninsula. Cereal crops also were good, but harvesting was carried out with difficulty. Potatoes were an excellent crop but in most cases they had to be dug by hand owing to the excessive rains. The fruit crop, on the whole, was light but prices were better than usual. Fodder crops were fair.

A small herd of pure-bred Jersey cattle headed by the bull, Babbacombe Bright Raleigh, is maintained at this Station. Experimental work includes studies in the cost of feeding milking cows, milk production, and cost of raising heifer and bull calves and cows.

Three, four and five-year crop rotations are under way, and the cost of producing each crop is determined and recorded.

Horticulture is the major line of work at this Station. It has been clearly demonstrated that by following a simple cultural system orchard trees may be carried through summers with practically no rainfall, without serious injury. The work with vegetables includes variety and cultural tests, the production of Elite Stock seed and studies in planting and in the use of fertilizers. Tests are also being conducted with bulbs, annual flowering plants, biennials, perennials, and flowering shrubs. Variety tests with tobacco have been conducted, and tobacco leaf of fair quality has been produced.

Head rows, rod rows and larger plots are used in the tests of varieties and strains of cereals.

Different varieties and strains of clovers and grasses are being tested, and corn and sunflowers have been compared with the standard mixture of wheat, oats and vetch. Some useful fertilizer studies are also under way.

With poultry special attention is directed towards the breeding, hatching, feeding and rearing of chicks. The Egg Laying Contest conducted at this Station is of especial interest to the people on Vancouver island.

In addition to the apiary at the Station, outapiaries have been maintained in fireweed areas with good results.

Experimental Sub-stations

The various Experimental Sub-Stations were established primarily to demonstrate the agricultural possibilities of the districts in which they are located. In spite of the difficulties under which the work is carried on much valuable information has been obtained which may serve the prospective settler as a guide in his farming operations.

At Fort Vermilion the season of 1927 was one of the driest on record. Nevertheless, very fair yields of fully matured crops of all varieties of cereals were harvested. While the cultivated hay crop was below the average there was an ample supply of native hay of good quality. In extremely dry seasons the annual fodder crops are much more dependable both as regards yield and quality than many of the perennial grasses which require more moisture. A number of varieties of corn were fully matured when harvested on September 7. Howes Alberta Flint led in the percentage of ripe cobs. Of the garden corn Golden Bantam was best this season. Tomatoes and garden beans did very well, and all varieties of currants produced fair yields.

At Salmon Arm, B.C., the spring was very dry but later in the season there was an excess of moisture. A fair crop of oats was harvested. Hay also gave a fair yield but the quality was poor. Most garden seeds failed to germinate. Experimental work was continued at Forts Smith, Resolution and Providence, Northwest Territories, and at Betsiamites, P.Q., under the direction of the Fathers in charge of the missions at those points.

DAIRY AND COLD STORAGE BRANCH

GENERAL

The season of 1927 was somewhat unfavourable for milk production in Ontario and in the three prairie provinces and, to some extent, in Quebec, but when comparison is made with the season of 1926, which was an extremely favourable one, the decrease is over-emphasized.

The following table gives the preliminary report of creamery butter and factory cheese production in Canada during 1927 as compared with 1926 production.

Creamery Butter

Province	1926	1927	Increase	Decrease
	lbs.	lbs.	%	%
P. E. Island	1,844,213	2,328,554	26·26	.....
Nova Scotia	4,789,590	5,108,110	6·65	.....
New Brunswick	1,413,454	1,885,252	33·37	.....
Quebec	50,822,389	56,724,357	11·61	.....
Ontario	62,530,133	59,800,000	.....	4·37
Manitoba	15,418,630	14,231,026	.....	7·71
Saskatchewan	16,629,136	11,995,531	.....	27·87
Alberta	19,912,466	16,425,000	.....	17·52
British Columbia	3,849,276	4,120,000	7·03	.....
Total	177,209,287	172,617,840	.....	2·60

FACTORY CHEESE

Province	1926	1927	Increase	Decrease
	lbs.	lbs.		
P. E. Island	2,002,857	1,656,430	.....	17·30
Nova Scotia	34,440	42,676	23·91	.....
New Brunswick	1,057,234	802,000	.....	24·15
Quebec	46,355,360	37,585,999	.....	18·92
Ontario	119,395,853	101,008,891	.....	15·41
Manitoba	863,658	664,172	.....	23·10
Saskatchewan	378,176	268,953	.....	28·89
Alberta	1,449,983	849,000	.....	41·45
British Columbia	194,070	164,000	.....	15·50
Total	171,731,631	143,042,121	.....	16·71

The partial failure of the 1926 fodder corn crop in Ontario, which resulted in a shortage of silage and some inferiority in quality, was a factor in the situation in that province, as shown by the fact that the decrease in cheese output was chiefly in the early part of the season. Towards the end of the season, production was nearly up to that of the corresponding period of the previous year.

Good wheat crops were responsible for the falling off in creamery butter production in the Prairie Provinces. The creamery operator whose profits disappear with a reduced output, gets small consolation from the fact that the cream producers have slackened their efforts because they are, or think they are, doing better in wheat growing.

The drop in butter production of 4,591,427 pounds, coupled with an increased home consumption, resulted in an actual shortage which made it necessary to import butter to supply the home demand. The mistake was made of importing more than was needed. The reports of the Bureau of Statistics show that the storage stocks on April 1, 1928, exceeded those of April 1, 1927, by 4,860,826 pounds.

Another factor in production for 1928 was the unusually large export of cows to the United States. These conditions are temporary, because even if the demand for cows in the United States should continue or even increase, it can be met by raising calves that are now slaughtered and the herds maintained at the same time. A good and steady market for dairy cows would mean another source of revenue for the farmer.

THE EXPORT TRADE

The export of cheese bears a very close relation to the total production year by year. The export of butter, however, shows no regular relation to total production. The maximum surplus available for export (34,128,944 pounds) occurred in the year 1902 when the total production of creamery butter was about 40,000,000 pounds, or less than one-quarter the volume produced in 1927, in which year there was an actual shortage of butter to supply the domestic demand. It is true that during the fiscal year ended March 31, 1928, the exports of butter from Canada amounted to 2,643,300 pounds, but the imports exceeded that quantity by several million pounds. The chief reason for this difference is that the per capita consumption of butter in Canada is over 27 pounds per year, and that of cheese is only 3·92 pounds. Increases of population affect the butter situation much more than that of cheese.

The fact that this country has been obliged to import butter has caused some comment. The fact is generally overlooked that in recent years the volume of cream and milk exported to the United States has been equivalent to about 25,000,000 pounds of butter. If this milk and cream had not been exported, there would have been a surplus of butter in Canada. No importation of butter would have been necessary, but the price of butter in Canada would then have been on the basis of the world's market and, consequently, lower than it has been during the past year.

It may not be out of place to recall the fact that this country was short of butter in the years 1912, 1913 and 1914 and the imports from other countries during the winter period in those years were nearly as large as in the year under review. It is also worthy of note that this former period of shortage and heavy imports was followed by years in which the creamery industry made greater progress than in any other period in its history.

The indications are that the export of cream will be very much reduced after June 1 when permanent United States permits will be required to comply with the regulation under the United States Cream and Milk Import Act.

THE GRADING OF DAIRY PRODUCE

The appointment of federal graders in Alberta in the spring of 1927 completed the service in all the provinces, except New Brunswick and Nova Scotia. Arrangements are made for the grader stationed in Prince Edward Island to perform the occasional service required in these two provinces.

A summary of the gradings of creamery butter and cheese in 1926 and 1927 is submitted for general information.

FEDERAL BUTTER AND CHEESE GRADING

Pasteurized Butter

Province	1927					1926				
	Packages	Spl.	1st	2nd	3rd	Packages	Spl.	1st	2nd	3rd
		%	%	%	%		%	%	%	%
P.E.I.	9,508	13·[illegible]	84·6	1·9	.....	8,549	21·8	76·5	1·7	.....
N.S.	632	.....	49·9	43·8	6·3	.....	.....	.....	.....	.....
N.B.	108	.....	92·6	.....	7·4	374	.....	82·4	17·6	.....
Que.	294,197	0·6	92·[illegible]	7·0	0·3	220,528	1·1	88·7	9·4	0·8
Ont.	47,179	.....	78·0	20·9	1·1	34,771	.....	81·7	17·5	0·8
Man.	157,671	0·2	66·[illegible]	23·8	9·5	182,869	0·3	66·4	25·1	8·2
Sask.	133,560	0·1	52·[illegible]	31·8	15·8	219,896	0·1	51·2	34·4	14·3
Alta.	37,838	0·2	60·[illegible]	30·2	9·4	27,575	14·9	62·3	21·2	1·6
B. C.	195	.....	64·7	25·6	9·7	378	.....	93·9	6·1	.....
Total average percentage	680,888	0·[illegible]	75·[illegible]	18·0	0·0	694,940	1·4	69·4	22·2	7·0
Number of packages by grades	.....	3,480	513,891	122,297	41,220	.....	9,483	482,601	154,457	48,399

Unpasteurized Butter

Province	1927				1926			
	Packages	1st	2nd	3rd	Packages	1st	2nd	3rd
		%	%	%		%	%	%
P.E.I.	6[illegible]	.....	100·0	.....	.....	.....	.....	.....
N.S.	6[illegible]	34·[illegible]	6[illegible]·[illegible]	.....	.....	.....	.....	.....
N.B.	24[illegible]	20·2	70·7	9·1	353	37·4	62·6	.....
Que.	87,129	74·7	24·2	1·1	123,090	71·6	27·2	1·2
Ont.	1,720	32·2	59·[illegible]	8·3	2,484	40·5	41·1	18·4
Man.	4[illegible]	73·8	26·2	.....	2,030	40·5	42·2	17·3
Sask.	.....	.....	.....	.....	87	.....	79·3	20·7
Alta.	12[illegible]	26·4	67·2	6·4	31	100·0	.....	.....
B.C.	26	27·6	72·4	.....	.....	.....	.....	.....
Total average percentage	89,644	73·[illegible]	25·3	1·2	128,075	70·3	27·8	1·9
Number of packages by grades	.....	65,843	22,694	1,107	.....	90,107	35,583	2,385

Cheese

Province	1927				1926			
	No. Boxes	Spl. & 1st	2nd	3rd	No. Boxes	Spl. & 1st	2nd	3rd
		%	%	%		%	%	%
P.E.I.	16,099	91·9	6·2	1·9	19,204	88·8	10·7	0·5
N.S.	.....	.....	.....	.....	.....	.....	.....	.....
N.B.	164	.....	26·2	73·8	469	6·4	70·6	23·0
Que.	413,061	74·1	24·5	1·4	517,247	77·8	21·2	1·0
Ont.	1,040,133	92·6	6·8	0·6	1,305,211	92·6	6·8	0·6
Man.	2,876	77·8	21·0	1·2	3,453	76·0	21·8	2·2
Alta.	.....	.....	.....	.....	.....	.....	.....	.....
Sask.	.....	.....	.....	.....	.....	.....	.....	.....
B.C.	.....	.....	.....	.....	.....	.....	.....	.....
Total average percentage	1,472,333	87·4	11·8	0·8	1,845,581	88·2	11·0	0·7
Number of boxes by grades	.....	1,286,046	173,764	12,523	.....	1,629,628	202,550	13,403

CARGO INSPECTION

The cargo inspection service, inaugurated in 1900, has been extended until it now covers all ports from which perishable produce is exported from Canada including Halifax, St. John, Quebec and Montreal, Vancouver and at Portland, Maine, during the winter months. The service at Vancouver covers shipments to the Orient, to Australia and New Zealand and also to the United Kingdom via the Panama canal.

The cargo inspectors report on the kind of produce, with the names of consignor and consignee, and the quantities in each shipment, together with a statement as to condition of packages, temperature of the produce when loaded, the position in which it is stowed in the ship, etc.

Locked recording thermometers are placed with the cargo in the different chambers, and blue prints of these records are made and distributed along with other information that may be considered useful to the agents of the shipping companies, to the engineers of the ships and to any interested shipper.

Complementary to the service at Canadian ports, cargo inspectors are located at London, Southampton, Bristol, Liverpool, Manchester and Glasgow. These inspectors report on the condition of cargoes of perishable produce as discharged on the docks and remove the thermograph records, which are mailed to Ottawa for blue printing and distribution.

This is a voluntary service performed without any statutory authority, but its value as independent evidence in case of complaint or dispute is so well recognized that it receives the cordial support and co-operation of the shipping companies as well as the exporters of produce.

Shipments of United States produce, for export to the United Kingdom, have been attracted to the St. Lawrence route because of the existence of this service.

ICED BUTTER CAR SERVICE

By arrangement with the railways, iced butter cars are operated on regular weekly schedules over definite routes from country points to Montreal, Toronto, and other market centres. These cars pick up shipments at way stations in less than carload lots and thus provide a service for creameries which would not otherwise be available except for shipment in car loads. The department guarantees the earnings at the carload rate from starting point to destination, plus $8 per car to apply on the cost of icing. The earnings are sufficient

on many of the routes to cover the guarantees and the total deficit is small considering the service rendered. Cars are inspected as to condition, cleanliness and proper icing and the quantities carried in each car are noted in the reports of the inspectors. Without such a service, the ordinary country creamery would be greatly handicapped in disposing of the butter produced. The alternatives would be (*a*) to ship by ordinary freight or express, or (*b*) to hold the butter until a minimum car load should be accumulated. In either case, the quality would suffer.

ICED CHEESE CAR SERVICE

The department arranges with the railways to supply iced cars for the carriage of cheese on demand of the shippers through the local railway agents. There is no guarantee of earnings on these cars which are usually loaded to full capacity at the stations where they are placed. The department pays $8 per car towards the cost of icing, on a limited number of cars. The object of this service is to secure the carriage of the cheese at low enough temperature to avoid the deterioration due to overheating.

DAIRY NEWS LETTER

A mimeographed Dairy News Letter of about ten closely typed pages, containing monthly statistics of grading, exports and imports of dairy produce and international news items of interest to dairymen, is published on the tenth of each month. It is sent to cheese factories and creameries, to provincial officials and to any person who is sufficiently interested to ask to have his name added to the mailing list.

DAIRY MARKET INTELLIGENCE

A Market Letter is published every Monday during the active manufacturing season at 2 p.m. giving a resumé of the Montreal, Toronto and New York butter and cheese markets, and the transactions on the country boards during the previous week. A cable on the London, England, market, the number of boxes of cheese and butter graded during the previous week, with the figures for the corresponding week of the previous year, in Ontario and Quebec (exclusive of Quebec city) and the receipts of butter at and the exports from the port of Montreal are also included. In addition to these summaries, the Montreal and Toronto butter and cheese markets are quoted up to noon on the day of issue.

As practically all cheese produced in Ontario and Quebec is now graded, the quantities graded are the best available information respecting current production. This does not apply to butter of which only about 25 per cent is graded. A large proportion of the butter produced is put up in prints for immediate local sale and this class of butter is not graded.

SUBSIDIES TO COLD STORAGE WAREHOUSES

Several proposals to erect cold storage warehouses under the terms of the Cold Storage Act were brought forward during the year. Contracts were entered into for small cold storages at Stellarton, N.S., Riviere du Loup, P.Q., and Chicoutimi, P.Q. The warehouses at Chicoutimi and Riviere du Loup have been completed and the first instalment of the subsidy has been paid. The warehouse at Stellarton, N.S., has not yet been completed.

Further contracts have been made for the payment of subsidies on terminal cold storage warehouses at Halifax, N.S., and New Westminister, B.C. The construction work on these proposals has not yet been started.

The terms of a contract provide that the Federal Government shall pay 30 per cent of the approved cost of the warehouse in four instalments; 15 per

cent on completion of the warehouse, at the end of the first year 7 per cent, at the end of the second year thereafter 4 per cent, and at the end of the two next succeeding years 2 per cent, providing the warehouse is maintained and operated to the satisfaction of the Minister of Agriculture.

CREAMERY COLD STORAGE BONUSES

Specifications and blue-prints of plans for creamery refrigerators were prepared and sent free to all creameries making a request for them. Under this plan of assistance, any creamery constructing a refrigerator in accordance with the plans supplied is eligible for a bonus of $100 provided that the reports of daily temperatures during the summer months and the report of an inspection by an officer of the branch are favourable.

The total number of applications received during the year was 45 of which 36 were approved and paid, the other 9 being refused or held over until the next year pending necessary alterations and improvements.

RESEARCH IN DAIRYING

Investigational work commenced by the Division of Dairy Research into a butter defect known to the trade as "surface taint" was concluded in 1927. The results were published in Pamphlet No. 91, N.S. entitled "Surface Taint Butter."

During the year research was carried out in co-operation with the American Dairy Science Association for the purpose of establishing a standard method for the microbiological examination of butter. From this investigation a standard technique has been developed for the estimation of moulds and yeasts in Canadian pasteurized butter.

A modification of the present butter score card has been made for the judging of exhibition butter, whereby manufacturers are awarded credit for improved methods of sanitation.

Details of the results of the above were published in Pamphlet No. 92, N.S., entitled "Studies on Moulds and Yeasts in Creamery Butter."

Considerable time has been given to studies on undesirable flavours in Cheddar cheese. Such factors as starters, water supplies, sanitation, sterilization of equipment are still being investigated.

As in former years, a number of dairy meetings and conventions were addressed. Assistance has been given to dairy manufacturers with problems requiring technical solutions.

THE ADMINISTRATION OF THE DAIRY INDUSTRY ACT

The staff engaged in the administration of the Dairy Industry Act was the same as during the previous year with the addition of another inspector at Montreal, P.Q., appointed in November. The inspection force now consists of one chief inspector, five full-time inspectors and six part-time inspectors. The more important provisions of the Act are those prohibiting the manufacture and sale of:—

(*a*) Butter adulterated either by means of foreign fat or by more than sixteen per cent of water;
(*b*) Butter and cheese containing less than the specified minimum of milk fat;
(*c*) Butter in prints of improper weight;
(*d*) Butter or cheese which is falsely or improperly branded.

Inspectors made preliminary tests for water content of samples of butter secured from manufacturers, wholesalers and retailers. Samples which accord-

ing to the preliminary tests show more than sixteen per cent of water as well as samples of butter or cheese suspected of being adulterated by means of foreign fat or of containing less than the legal minimum of fat were submitted for chemical analyses. Inspectors made preliminary tests of 9,436 samples of butter, of which 1,027 samples showed more than sixteen per cent of water.

The following statement shows the number of convictions secured on account of various offences and amounts of fines imposed:—

Offence	Number of Convictions	Fines
Excess water in butter	103	$ 1,895 35
Butter Substitutes containing Fat other than that of Milk or Cream	7	1,830 00
Short weight Prints of Butter	8	140 00
	118	$ 3,865 35

Convictions secured during the year show an increase of 58 as compared with the previous year, and fines an increase of $2,123.80.

The authority conferred by the Act to seize and confiscate illegal dairy products or equipment used in the manufacture or manipulation of illegal dairy products is only exercised in extreme cases. Following is a statement of such confiscation of butter showing the number of confiscations on account of different offences, the number of pounds so confiscated and the proceeds from the disposal of the same:—

Offence	Number of Confiscations	Number of Pounds Confiscated	Net Proceeds
Butter for sale containing over 16% water	11	738	$ 116 73
Substitute for Butter containing Fat other than that of Milk or Cream	8	1,369	220 48
Total	19	2,107	$ 337 21

The proceeds from fines imposed and from sale of confiscated products have been remitted to the Receiver General.

Milk Utilization Service

The work, which has for its object the dissemination of information as to the food and nutritional value of milk and its products, has been carried out along the more or less established lines during the year. The dietitians employed in this work had booths for demonstration purposes at the leading exhibitions, attended meetings of health and child welfare organizations, women's institutes, dairy conventions and other similar gatherings. A phase of the work which seems to be popular as well as effective is in connection with the schools—public schools to reach the children, and normal schools to interest and instruct prospective teachers.

The publications used in this work are being reprinted frequently to meet the continued demand.

A new poster entitled "Milk, Builder of Nations," of artistic design, has been much in demand by Public Health Nurses, school teachers, milk distributors, and other interested people.

General Notes

A very important activity of the Dairy and Cold Storage Branch is the attendance by members of the staff at the various annual dairy conventions and special dairy meetings held throughout the year. The Commissioner and other members of the headquarters staff attended and gave addresses at all the provincial conventions in Canada during the past winter.

The dairy produce graders are employed during the slack season to make demonstrations of grading at the dairy schools and at special meetings of cheesemakers held throughout the cheesemaking sections of the country. There has been a very marked growth of interest in such matters since the adoption of the grading system in 1923. The cheesemakers exhibit very commendable ambition to become familiar with the standards required to secure the highest grades.

Another service which demands a good deal of time on the part of the headquarters staff is the large correspondence on technical subjects relating to dairying and cold storage.

There were two resignations from the staff during the year. Mr. W. F. Jones, B.S.A., who was Chief of the Division of Dairy Manufactures, resigned to accept a commercial position. Mr. E. W. Light, Dairy Grader, Saskatoon, Sask., resigned to take up another line of work. The position vacated by Mr. Jones has not yet been filled, and Mr. Light's position was filled by a transfer from the Montreal staff. An assistant dairy produce grader was promoted in Montreal to fill the vacancy so caused.

HEALTH OF ANIMALS BRANCH

The three divisions of this Branch are jointly concerned with safeguarding our live stock industry, the maintenance of our foreign markets and export meat and canned food trade. Every precaution is taken to prevent the entrance of disease from foreign countries and research work is constantly carried out on problems of disease and method of control.

Animal Contagious Diseases Division

The freedom from extensive outbreaks of scheduled contagious diseases has permitted the employment of a large number of our veterinary officers in the control and eradication of bovine tuberculosis throughout the country.

Serious contagious diseases continue to be prevalent in foreign countries. There is need of constant vigilance therefore to prevent the introduction of these epizootics into the Dominion as a single outbreak would menace our entire export trade. Canada has an enviable record of freedom from contagious disease which all concerned are anxious to maintain.

Foot and Mouth Disease.—Serious outbreaks of foot and mouth disease have occurred practically all over Europe.

The order of May, 1926, imposing restrictions on imports from Mexico, was cancelled by order issued March 7, 1928, as foot and mouth disease no longer exists in Mexico.

In England foot and mouth disease has been prevalent for a considerable time.

As Scotland had been free from foot and mouth disease for a long period an order was issued on May 6, 1927, that permits for the importation of ruminants and swine from that country would be considered provided the animals to be imported had been in Scotland for the preceding sixty days and were shipped direct to Canada.

On June 6, 1927, an order was issued that permits for the importation of ruminants and swine from England would be considered as no case had been reported since April 6, 1927. As, however, foot and mouth disease again broke out in England, all permits for shipments from England were cancelled by order of July 8, 1927, but permits were considered for ruminants and swine direct from Scotland or Ireland provided the animals were accompanied by an affidavit indicating they had been in those countries for a period of sixty days immediately preceding date of shipment.

In the Irish Free State foot and mouth disease broke out after several years' freedom from the disease and an order was issued on February 21, 1928, prohibiting the importation of ruminants and swine from Ireland.

The certification of fodders used in packing merchandise has been fairly general and any fodder-packed shipments not accompanied by satisfactory certificates have been disinfected at our fumigation stations in Vancouver, Montreal, and St. John, N.B. The charges made at these stations are high in order to discourage uncertified shipments.

As some difficulty was experienced in getting satisfactory certificates and effective disinfection a new order was issued on March 21, 1928, to come in force on June 1, 1928, prohibiting the importation of merchandise packed in hay, straw, or any other product of the soil from all countries excepting the United States, New Zealand, and the Union of South Africa unless (1) accompanied by a certificate signed by an authorized veterinarian of the country of origin that the packing used has been subjected to formaldehyde fumigation, or (2) the packages are disinfected in one of the fumigation stations maintained for that purpose at certain seaports.

As the exact certificate required and the method of fumigation are clearly outlined in the order it is hoped that the procedure will be simplified and at the same time adequate protection will be afforded our live stock from infection with such epizootics as foot and mouth disease.

Our export store cattle trade with Great Britain has entirely ceased during the past year. The veterinary inspectors required to accompany store cattle have therefore been available for tuberculin testing in restricted areas for the eradication of bovine tuberculosis.

Glanders.—One case of glanders was discovered in Ontario. This was the only case in the Dominion during the year. Glanders is controlled by a policy of slaughter and payment of compensation.

Hog Cholera.—Hog cholera was dealt with in Ontario and Quebec. Only four outbreaks occurred, which were quickly controlled under our policy of slaughter of infected animals and payment of compensation along with immunization of all swine in close proximity with anti-hog cholera serum.

All foreign hogs are quarantined for thirty days before being allowed to enter Canada and the feeding of collected garbage is permitted only under license. These regulations have been effective in reducing the number of outbreaks of hog cholera.

Mange.—Mange in cattle has been detected in the provinces of Alberta, Saskatchewan, Manitoba, Ontario, and New Brunswick. The number of clinical cases is not large, but the number of cattle held under quarantine and treated as contacts is considerable, especially when mange occurs in range herds.

Early diagnosis is essential and it has been necessary to institute prosecution proceedings against any owner who fails to report suspicious cases.

Sheep Scab.—No sheep scab is known to exist in Canada at the end of this fiscal year. The flocks quarantined in Alberta have all been released after treatment.

Horse Mange.—Horse mange has occurred in New Brunswick, Manitoba and Alberta. No trouble has been experienced in controlling these outbreaks, but in Manitoba a considerable amount of time has been occupied in examining horses on Indian Reserves on which mange was detected.

Anthrax.—Anthrax was confirmed in one outbreak in Quebec and one in Ontario. This disease is rarely encountered in Canada but as it is a very fatal disease in all classes of live stock, supervision is maintained over all hides, skins, wool and hair from infected countries, and if uncertified they go forward under restrictions to be disinfected at destination.

Dourine.—Dourine, a serious disease affecting the horse-breeding industry, has not been detected in the Dominion for eight years.

Rabies.—Rabies has been restricted to Alberta, Ontario and Quebec. In Alberta the outbreak occurred in Calgary and was quickly eradicated. In Ontario and Quebec the disease has been troublesome but has been kept under control by individual quarantines of all contacts in conjunction with the enforcement of municipal by-laws by local authorities.

Tuberculosis.—Satisfactory progress has been made in the control of bovine tuberculosis. Public opinion has advanced more rapidly than our ability to keep pace with it. Applications for assistance under the different tuberculosis plans cannot all be dealt with promptly and many unavoidable delays occur.

The progress in eradicating and controlling tuberculosis is limited by the number of veterinary inspectors available and the expenditure incurred.

Accredited Herds.—There are now three thousand two hundred and thirty-five (3,235) fully accredited herds in Canada and two thousand five hundred and eighty-eight (2,588) are under process of accreditation, while two hundred and sixty-four (264) are awaiting test.

Supervised Herds.—The owners of nine hundred and sixty-seven herds took advantage of this plan. These are stockowners who are unable to comply with the requirements to come under the Accredited Herd Plan.

Municipal Tuberculosis Order.—No new municipalities have been accepted under this plan for five years. Supervision is still maintained over the herds supplying milk to the thirty municipalities throughout the Dominion which were previously accepted. The time has come when the municipalities concerned must be prepared to maintain the veterinary supervision of the herds supplying them with milk as is provided for in the Municipal Tuberculosis Order.

The order is largely a public health measure and from the agricultural point of view much better progress could be made with the same number of veterinary inspectors employed in restricted area testing.

Restricted Areas.—The testing of all cattle in specified areas for the eradication of bovine tuberculosis is rapidly gaining favour with cattle owners as they are then no longer suspicious of their neighbours' cattle and the risk of infection is practically removed.

Under the restricted area plan tuberculosis-free herds are protected from infection while infected herds are cleaned up and are no longer a source of danger.

Restricted areas become recognized centres for buyers and they feel an added security in purchasing in districts practically free from tuberculosis. Restricted areas have been established in all provinces except Alberta.

The new areas in which cattle have been tuberculin tested during the year are as follows:—

An extension of the Huntingdon area in Quebec, including the counties of St. John, Napierville, Laprairie, Chambly, Vercheres and a portion of Richelieu west of the Richelieu river. In this area over 50,000 cattle were tested with 5·9 per cent of reactors.

The counties of Missisquoi and Iberville in Quebec, a further extension of the restricted area in Quebec, was commenced in February, 1928, and work is still in progress. At the end of the year, March 31, 1928, approximately 28,000 cattle had been tested with 18·9 per cent of reactors.

Prince Edward county in Ontario with over 24,000 cattle had 2·1 per cent of reactors.

The province of Nova Scotia, excluding Cape Breton, was commenced in September, 1927, and at the end of the fiscal year over 177,000 cattle have been tested with 2·4 per cent of reactors.

An extension of the Harvey area in New Brunswick, including over 2,000 cattle, was completed in March, 1928, with only 0·54 per cent of reactors.

The first annual retest of the Fraser Valley area in British Columbia was conducted from March to May, 1927. Over 46,000 cattle were retested and infection was reduced to 1·1 per cent.

Inspection of Stock Cars and Yards.—All stockyards are periodically cleansed and disinfected under supervision of officers of this division. All stock cars are cleansed and disinfected under supervision at a number of centres throughout the Dominion. This is carried out as a routine measure. Stock cars or other cars which have conveyed hides, wool or other products conveyed under restrictions are cleansed and disinfected before being used for any other purpose. Only approved disinfectants in proper strength of solution are permitted in this work, all of which is carried out under supervision of our officers.

Pathological Division

The erection of the new Research Laboratories, upon which work was commenced during the year 1926, has been completed. The building has just recently been occupied by the Pathological Division as their new headquarters and research centre. It is a modern, fireproof, four-story structure, 122 feet in length and 42 feet in width, designed and constructed as an institute for research in comparative pathology. The installations include electric power, water pressure and vacuum pumps, high-pressure steam, a refrigeration system, bacteriological incubator rooms, oil-burning furnaces, etc.

Considerable laboratory equipment has yet to be installed, but very satisfactory progress is being made. New stables are also in the course of construction. The department, through the Health of Animals Branch, will now be in a position to extend the services of the Pathological Division to undertake further important researches, and to meet the reasonable demands of the live stock interests in connection with the problems of animal disease, control and prevention.

The activities of this division are grouped under (1) research into animal diseases and the development of scientific, efficient and practical methods of controlling and preventing animal disease; (2) the manufacture of biological products, such as tuberculin, mallein, serums and vaccines; (3) laboratory services in connection with the diagnosis of disease, the identification of specimens, parasites, etc., and work of an investigational nature carried on both at the laboratory and in the field; (4) examinations of meat and canned food products.

The volume of work performed in the past twelve months is far in excess of that of any previous yearly period. It is conducted at the Biological Laboratory, Ottawa; the Research Station, Hull, P.Q.; the Veterinary Research Stations at Lethbridge, Alta., and at Agassiz, B.C.; and at the Central Experimental Farm, Ottawa.

Tuberculosis.—This is one of the most important and, at the same time, the most difficult problems of disease control and prevention. Intensive research in the laboratories is carried on simultaneously with work in the field and is in constant association with the objective of the department's campaign to establish tuberculosis-free herds and areas, and to eliminate all known sources of infection.

The changing character of the tubercle bacillus and the chemical nature of its toxins and products; the various types of infection that are encountered and transmission from one animal species to another; individual and racial susceptibility and resistance, hereditary influences, etc., are some of the factors that have to be reckoned with and studied by laboratory methods.

The work of Professors Calmette and Guérin of the Pasteur Institute, France, and the claims made for their vaccine known as "B.C.G." (Bacillus-Calmette-Guérin) have revived the possibilities of prophylactic vaccination. Exhaustive research in this connection is a necessity which this department was one of the first to recognize and undertake. The B.C.G. method of anti-tuberculosis vaccination has been preceded by many others which at one time or another were strongly and prematurely advocated, but which proved either too dangerous or of no practicable value as measures of control and immunization. Our researches upon this question, continued from year to year and involving experiments upon a large number of cattle and over a thousand laboratory animals, have shown quite clearly that the original claims made for B.C.G. vaccination could not be substantiated. These, in fact, have now been considerably modified by the originators of the vaccine. Even so, B.C.G. prophylactic vaccination is still a matter of doubt, and is gravely questioned both in Europe and in America. The results and the evidence derived from our own research and experiments up to this time do not support or afford justifiable grounds for recommending or even permitting the use of B.C.G. vaccine as a practical, safe and efficient means of controlling bovine tuberculosis in this country. Further research is in progress, and the vaccination question cannot be answered or decided one way or the other at this time; but it is as well to state that the hopes and expectations aroused and propagated by making or accepting premature announcements have not been realized.

However, the question has been productive of renewed, intensive and widespread research into the nature of tuberculosis resistance and immunity; and every additional fact bearing upon this phase of the tuberculosis problem is a gain and an advance towards its solution.

Tuberculin.—The laboratory manufacture of tuberculin has been increased enormously to meet the requirement for tuberculin testing of cattle. For the year ending March 31, 1927, the output was 1,241,971 test doses, and for the year ending 1928, 2,024,232, which, at a valuation of only 5 cents per dose, this being less than one half of the commercial price, represents a sum of $101,211.60.

Our researches into the chemical nature and properties of tuberculin have resulted in improved methods of preparation and standardization, and in the issue of a product that is giving complete satisfaction.

Studies have been made and are in progress upon tuberculous infection of poultry and of swine. Avian tuberculosis is assuming more and more importance and is evidently increasing in districts engaged in intensive poultry farming. Furthermore, our laboratory examinations during the past year have shown that tuberculosis is appearing on some of the silver black fox farms, and, finally, the interesting discovery was made that a number of wild crows were severely infected with the disease. This latter observation is not only of much interest scientifically, but also from a practical point of view, as the possibility of crows, as scavenger birds, being a medium for carrying and spreading infection, cannot be overlooked.

Rabies.—The laboratory diagnosis of rabies was made in 45 cases. One hundred and four heads were received and evidence indicating rabies was found in 36 dogs, 2 sheep and 7 cattle.

Bovine Infectious Abortion.—With the object of demonstrating the possibility of maintaining or building up herds of cattle free from abortion infection, and in co-operation with the owners of a limited number of selected herds, a large number of blood tests have been made and repeated at periodic intervals. It is quite possible, by taking the necessary measures as are indicated by the results of the blood tests, to free a herd from this troublesome infection.

Poultry Diseases.—Research and experimental work on poultry diseases has been considerably extended, and practical ways and means of preventing many of the troubles affecting poultry, based upon scientific knowledge, are being developed and recommended. Special attention has been given to bacillary white diarrhœa, and approximately 6,000 blood tests have been made for determining the carriers of this infection.

Parasitic Infestations.—Losses in young animals of all classes, pigs, lambs, calves, poultry, foxes, etc., are reported as very heavy, and there can be no doubt that a proper control of parasitic infestations and diseases is necessary for the successful raising of any class of live stock. The life cycle and the habits of the more important of such parasites is under continuous study. The solution of this problem lies unquestionably in methods of preventing infestation by a proper rotation of pastures and the maintenance of sanitary conditions in enclosures and pens.

Miscellaneous.—Six thousand seven hundred and fifty-two specimens and samples were received for laboratory examination. There has been a very heavy correspondence with live stock owners in connection with disease or abnormal conditions upon which advice was needed.

Imperial Agricultural Research Conference, London, Eng.—The chief pathologist attended this important conference. One of the decisions arrived at, and unanimously agreed upon, was the organization and establishment of a Bureau of Animal Hygiene for the main purpose of collecting information on this subject gathered from all parts of the Empire and disseminating it to Government institutions and research workers.

Meat and Canned Foods Division

During the year just ended there was an increase in the total number of animals slaughtered in establishments under inspection of approximately 142,000.

No improvement was shown in the British bacon market, which was reflected in the prices paid to producers for live hogs. On the other hand, prices for good beef animals were never so good, with the exception of the period following the close of the war.

The demand for well-bred and well-finished beef animals continues to be good and there is every prospect of it being maintained, especially in the United States, where the demand for this class of meat food is strong.

It is also encouraging to note that the demand for Canadian bacon is growing in some of the larger centres in the United States. It is becoming more evident that to gain and hold the foreign market, it is essential that the production of meat-producing animals must be on the basis of quality.

If the necessary attention is given to breeding and feeding as well as to the proper preparation of the finished product, the demand for Canadian meat products will continue.

With respect to sanitation and equipment in the various plants, the high standard that has obtained in previous years is being well maintained.

There were more establishments under inspection than in the previous year, and a number of other plants are making the necessary arrangements in order that they may obtain the benefits of inspection in the coming year.

During the past year certain of the regulations governing the inspections of meats were amended in order to carry out more effectively the intent of the Meat and Canned Foods Act.

The plants engaged in the canning of fruits and vegetables were very busy during the year. There was a heavy pack of peas, which were generally of a better quality than usual.

The season was not good for corn and the pack was light. The poor season materially affected the early pack of tomatoes. They ripened slowly and were not a good colour. The later crop, however, was abundant and good in colour, which permitted a good average crop of good quality.

There was a poor crop of apples and the evaporators and dehydrators had a short run. Prices were good and few were left in the country at the close of the season.

The plants handling condensed and evaporated milk had a good year, there being a ready market for their products. This trade is increasing rapidly and new plants are being built with every prospect of doing good business.

The regulations governing the inspection of preserved fruit, vegetables and milk were amended during the year and new standards of quality were made operative. These standards of quality in connection with canned fruits and vegetables are creating on the part of the purchaser a confidence which is reflected in the continued increase in the consumption of this class of food.

THE LIVE STOCK BRANCH

Horse Division

During the fiscal year just closed there was a continued improvement in the horse industry. In fact from all standpoints it was the banner year. Those engaged in the industry report a steady demand at higher prices with a consequent stimulation of interest and more breeding. During the calendar year 1927, upwards of 18,500 horses were shipped from the Prairie Provinces to Ontario, Quebec, and the Maritimes, the two former taking upwards of 8,000 each. In addition some 2,850 horses were bought in Saskatchewan, Alberta, and British Columbia for shipment to Russia, making a total of approximately 21,400 taken out of the western provinces during the year. The horses purchased for Russia were of the lighter type for which there is little demand in this country. Accordingly the finding of a market outside the country by the department really meant so much found money for the breeders.

In the last report the fact was mentioned that the department had found a market for 1,000 range horses in Russia. These horses were bought by officers of the Live Stock Branch and delivered at Leningrad. Last year, while the Russians had their own inspectors in the country, the work of buying, shipping, and delivering on ship board at Quebec was performed by officers of this branch, including even the buying of feed for the voyage to Russia. This assistance was a service rendered by the department in the interests of the western breeders. Russian agents are again in the country arranging for further shipments, which would go to prove that the horses already sent have been satisfactory.

The demand for saddlers and hunters, also polo ponies, continued steadily throughout the year at very satisfactory prices; in fact good specimens brought considerably more money than previously. Owing to the supply not being equal to the demand, the various districts in Canada which make a specialty of breeding this type of horse were literally combed for suitable specimens.

The keen demand throughout the year for big drafters for various kinds of city work, farm chunks, lumberwoods horses, heavy and light delivery, police, fire and remount horses, as well as saddlers and hunters at good prices, made the year, from a financial standpoint, most satisfactory and at the same time did much to encourage more horse breeding.

CLUBS

The number of Horse Clubs in operation during the year was slightly larger than previously, practically all of them being located in the three Prairie Provinces. The demand for club stallions, which must be good specimens, as they are subject to inspection, has been the means of encouraging importers to bring in a better class of stallion than heretofore. The organizing of a club in a district really establishes community breeding and makes the district a headquarters for a certain type of horse. Being forced to continue from year to year with stallions of the same breed has done much to improve the type and quality of the horses. This in turn provides better breeding mares as the years go by and as the old ones drop out. Clubs also are protected as to the kind of horse that stands for service in their district while stallion owners are guaranteed a definite number of mares at a stated service fee. At the end of the service season one-third of the fees are collected by the club and handed to the owner, thus saving him considerable expense and annoyance and at the same time guaranteeing him a definite amount at a specified time.

BREEDING STATIONS

During the year, seven breeding stations were in operation. Undoubtedly a couple more would have been started but for the scarcity of good, big, thoroughbred stallions of the hunter type. The growing demand for saddlers, hunters, and light delivery horses, as well as for driving and working on the farms, has created a great deal of interest in this policy. The fact that there are several markets for colts of the hunter type and all at remunerative prices is an assurance to the breeder than even if a horse does not possess the quality necessary to bring a high price as a saddler or hunter, he nevertheless can be disposed of at a fair price and is also a useful animal on the farm. The fact that, while green horses of the saddler and hunter type bring good prices, training enhances their value greatly, has led men and boys on the farms to spend much of their spare time in educating the colts. This is not only proving beneficial to the breeder from a monetary standpoint but is also giving the farm boys an added interest in farm life; in fact it is a form of recreation for which the city man pays high. As an example of the change that has taken place during the last half dozen years, it may be pointed out that colts that could then be bought for $100 while $125 was considered a very good price now bring from $200 upwards, and those that have been given a certain amount of training bring up to $500, while those that have been trained and mannered bring much more, the prices varying according to the size, conformation, and quality of the horse.

The average percentage of colts throughout the years has been very satisfactory. The result of last year's breeding operations, particularly at some of the stations, has been considerably above the average. At one Station the average for four stallions was 67 per cent in foal of the mares bred. The greatest handicap at the present is the lack of suitable stallions. A few, however, are being imported yearly, and it is hoped that this number may be increased for the coming year.

THE HUNTER, SADDLE, AND LIGHT HORSE IMPROVEMENT SOCIETY

Though spoken of for some time, it was within the last two years that a definite attempt was made to organize a Hunter Society along the lines of those already in existence in Great Britain and Ireland. The initiative was taken by certain Toronto fanciers, who enlisted the aid of well-known horsemen throughout the province, with the result that the above-named society was formed.

During the year, however, the department, feeling that the society would do a great deal of good in the interests of the industry and would be a benefit to the country, made a generous grant to the society for the purpose of enabling it to start work. The idea is to carry on work similar to that of the societies in England and Ireland; that is to say, to open a stud book for the purpose of taking in suitable foundation mares and eventually suitable stallions possessing the required breeding, using as sires big, thoroughbred stallions of the hunter type. This society is so formed as to take in all provinces, and already steps have been taken to interest the various provincial departments and societies. Already some four hundred mares have been inspected and approved for the new book.

FUR FARMING

Silver Foxes.—The number of fox breeders has gone on steadily increasing, due no doubt to the high prices being paid for good pelts in the markets of the world. As an example of what this means and as an item of interest it may be said that one firm of Canadian foxmen secured just under $1,200 for a choice pelt at the recent London sales. While each year, as in every other business, many poor pelts go on the market from foxes that have been killed out of season, or that died from one cause or another, or that through ill health failed to fur up properly or that have gone off, which affect the average of all the pelts put on the market, nevertheless the average price was good. When, however, the poor stuff is eliminated and only the fair and good pelts considered, the average price for the year was remarkably good. The demand for breeding stock, all things considered, was particularly good in certain sections at fair prices, although not to the same degree as during the previous two or three years. This is not to be wondered at, however, when it is remembered that fox farming has been firmly established in every province of the Dominion. It has become one of our stable industries that is returning to the country a splendid yearly revenue.

Other Fur-Bearers.—There has been a steady increase during the year in the number of people engaged in fur farming. Last year attention was drawn to the fact that the demand for mink exceeded the supply and that the prices for both breeders and pelts had increased very greatly during the last three or four years. The prices for breeders has continued, while mink pelts went as high as $52, which is, it is reported, a record. As an indication of the interest being now taken in mink breeding, it might be stated that an inquiry has recently come from Belgium as to the obtaining of some 250 to 300 pairs for shipment to that country. Mink thrive well in captivity and can be taken care of with a minimum amount of trouble, while the returns on investment are particularly good.

There has also been a considerable increase in the breeding of chinchilla rabbits and muskrats as well as some increase in the breeding of various kinds of fur-bearers heretofore mentioned. Frequently inquiries are received regarding the obtaining of marten for breeding purposes. Owing to the scarcity and the difficulty of obtaining these little animals, however, it is impossible to secure anything like the number required.

Badger farming in Western Canada is now getting under way, while raccoon raising, particularly in the province of Quebec, is becoming well established. A percentage of the many letters received ask the question as to the future of fur farming. Considering the two chief factors, viz: that the supply from the wilds is diminishing, while the demand for furs is increasing, it is safe to assume that the raising of fur-bearing animals will continue to be a paying industry and one that will prove a definite source of revenue to the country.

Cattle Division

THE DOMESTIC BEEF MARKET

A year ago, in co-operation with the Department of Agriculture, a committee was appointed by producers east and west to inquire into the possibility of developing the domestic market for beef. Officers of the department were chairman and secretary, respectively, of this committee.

As a result of the activities of the committee, the problems affecting the beef industry have been very widely discussed throughout the country during the past year. While it is admitted that since the spring of 1927 producers of beef cattle in Canada have enjoyed a profitable market, it is realized that this may prove to be only a temporary condition. In the past, this section of the live stock industry has been subject to such extreme fluctuations in price levels that at times it has seemed almost doomed to extinction. As a result, there is a very general feeling not only among producers but in the trade that the present is an oportune time to endeavour to establish the business upon a more secure foundation.

In order to provide an oportunity for the consideration of the committee's report and for the discussion of all problems relating to the industry, a Dominion beef cattle conference has been called by the department at Winnipeg on June 28 and 29, 1928. It is hoped that a plan agreeable to producers, to consumers, and to the trade providing for the grading of beef for the domestic market will develop out of the discussion at the conference. With this accomplished, it should then be possible to relate export requirements to those of the home market and to build a national production policy which all interests can get behind in promoting the breeding and finishing of cattle to suit these requirements.

There is no question that Canadian farmers can produce cattle of the desired quality if reasonable assurance of an attractive outlet can be given. If the home market can be made to provide the initial incentive, the industry will be placed in a position to take the fullest advantage of export opportunities as they occur. A high standard of quality combined with continuity and volume of supply are fundamental essentials in holding export markets. It is of paramount importance, not only to Canadian producers but to the revenues of the country, that the present favourable situation in the beef industry be capitalized to develop to the maximum its potentialities as a source of supply for the world's markets.

BOYS' CATTLE-BREEDING CLUB POLICY

Since 1921, the work undertaken in conjunction with the various provincial departments under this policy has been steadily enlarged. In the province of Quebec, agricultural practice in many districts has been revolutionized as a result of the activities carried on by the clubs. This has been due largely to the close co-operation which has existed between the provincial and the federal departments in promoting this phase of the work and to the definite supervision which has been continuously exercised. While the number of clubs has been increased each year, care has been taken that aplications were not accepted in excess of the number of suitable heifers available. In Nova Scotia and in Prince Edward Island, excellent results have been obtained through club activities and during the past two years the work in Ontario has been steadily expanded.

One of the important features of the policy is the valuable experience which the boys are securing in the feeding, showing and judging of live stock. At the annual competitions, the boys have furnished a real demonstration of proper showing and some of the competitions have attained remarkable proportions. As an example, it may be mentioned that last season the members

of one club brought out forty-nine head of pure-bred stock which represented their holdings after three seasons' work and included only foundation heifers and their descendants.

Possibly the most important results are being obtained in the development of the boys themselves. The general experience in financing and in business methods and the keeping of accurate records of feed costs and production all contribute to the development of real breeding instinct. The ability which the boys have attained and the intelligence which they have displayed in the feeding and handling of dairy stock is attested by the large number of club heifers which have qualified in Record of Performance.

CALF FEEDING CLUB POLICY

This policy, which has for its objective the training of young boys and girls in the proper feeding, caring and exhibiting of calves, was inaugurated in the province of Quebec six years ago. From a start of 10 clubs in the first year, the work has grown steadily until some fifty competitions have been held in that province during each of the past two years. In 1927, the policy was extended to the Maritime Provinces, a total of thirty-five competitions being authorized. In each province, the work is carried on jointly by the provincial and federal departments, the provincial department in each case providing 50 per cent of the prize money actually awarded and also assisting in supervising the clubs during the season. The policy has been amended from time to time and now provides for the feeding and care of the calf being continued under supervision until the following year when it is shown as a yearling. As some of the clubs have as high as eighty members, competitions arouse an exceedingly high degree of interest and enthusiasm, practically the whole countryside turning out for these events. An attendance of 1,000 or over is not uncommon. The influence of this work on the community is accordingly far reaching in its effect and clubs rapidly develop into community breeding centres. In addition to the financial awards which the boys receive, the instruction in all phases of live stock feeding and management which they so readily absorb and the increased interest which they take in general live stock and farm work is considered by many of the parents to be one of the most valuable features of the policy.

During the season of 1928, it is expected that at least eighty-five clubs will be in operation in Quebec and a total of fifty in the Maritime Provinces.

ADVANCED REGISTRATION OF DAIRY BULLS

This work, which was started in 1925, is now firmly established in the confidence of breeders of dairy cattle. It is noticeable that reference to Advanced Registry credentials is featured in newspaper writeups of outstanding pure-bred herds as well as in the advertisements of individual breeders.

While the number of bulls which have been passed has not been high in relation to the total number annually produced, it is felt that recognition which has been given to the bulls which have been granted Advanced Registration has resulted in a more definite fixing of attention on the essential qualifications of a sire if he is to prove of value at the head of a dairy herd. This has been reflected in a very material increase in entries of cows in the Record of Performance, as breeders are beginning to realize that to find ready and profitable sale, young bulls must not only be good individuals themselves but they must also be from dams of recognized merit as regards production.

RECORD OF PERFORMANCE FOR PURE-BRED DAIRY CATTLE

Although some restrictions have been imposed on the service by charging a small entry fee and by limiting the acceptance of applications for entry to those who have at least three pure-bred cows of milking age, the past year has again shown an expansion in the work. Eight hundred more cows have been entered for the test than in any previous year.

The appointment of ten additional inspectors has enabled the work to be carried on efficiently and has benefited the owners of cows entered in the test very considerably. Although the work has increased in all provinces, the number of new entries from the province of Quebec is phenomenal and it will not be long before additional inspectors will be required for that province.

From the time of its inception, the object of the Record of Performance has been to provide reliable information as to the milk and butter fat production of pure-bred dairy cattle for full lactation periods and thereby to enable dairy farmers to select animals which will effect general improvement in their herds. The steady expansion of the work year by year indicates that the value of proper production credentials is becoming generally recognized by commercial dairymen as well as by breeders. The first question which is invariably asked to-day by a prospective purchaser is, "What are the records of the animal itself or its ancestors?"

The following is a summary of the number of cows entered in the Record of Performance during the past year and the number of certificates issued for cows and bulls during the same period, also the number of cows and bulls which have qualified for certificates since the inauguration of the Record of Performance.

NUMBER OF COWS ENTERED FOR THE TEST DURING THE PAST YEAR

Ayrshire	2,357
Brown Swiss	9
French-Canadian	317
Guernsey	286
Holstein-Friesian	3,096
Jersey	1,423
Red Poll	74
Shorthorn	445
	8,007

NUMBER OF RECORD OF PERFORMANCE CERTIFICATES ISSUED DURING THE PAST YEAR

	Cows	Bulls
Ayrshire	868	52
Brown Swiss	4	1
French-Canadian	171	11
Guernsey	144	7
Holstein-Friesian	1,179	76
Jersey	614	26
Red Poll	39	1
Shorthorn	270	12
	3,289	186

TOTAL NUMBER OF CERTIFICATES ISSUED SINCE THE COMMENCEMENT OF THE RECORD OF PERFORMANCE

	Cows	Bulls
Ayrshire	5,572	264
Brown Swiss	14	2
French-Canadian	628	28
Guernsey	579	23
Holstein-Friesian	7,618	380
Jersey	3,697	155
Red Poll	148	4
Shorthorn	1,707	52
	19,963	908

Cow Testing

The Cow Testing service, planned to point out the poor producing cows in grade dairy herds, continued to progress during the year 1927. All of the original associations, numbering 86, organized in the early part of the year 1926, continued in the work. These, with 18 new associations, gave a total of 104 associations operating in the past year with a total of 15,003 cows under test.

During July, at the request of the Provincial Department of Agriculture for Manitoba, cow testing was undertaken by the branch in that province and a dairy promoter was appointed to take up the work. For the balance of the season of 1927, the promoter devoted his attention to introductory work and succeeded also in starting four associations in the work before the close of the cow-testing year.

The following is a summary of the distribution and amount of cow-testing service work conducted for the year 1927:—

Province	Associations	No. of Herds	No. of Cows
Alberta	3	41	438
Quebec	49	647	9,002
New Brunswick	16	201	2,207
Nova Scotia	31	449	2,993
Prince Edward Island	5	60	363
Total	104	1,398	15,003

The Cow Testing Register plan was introduced in 1925 and has made steady progress. It is applicable in any district in which a Cow Testing Association is being supported by the Dominion Live Stock Branch, to a limited number of herd owners who wish to select the best cows in their herds for breeding purposes. The supervision given by the branch is sufficiently close to justify the issuing of a production certificate to any cow which reaches a standard of 6,000 pounds milk and 300 pounds fat in twelve consecutive months.

Since the Cow Testing Register was started to March 31, 1928, 35 herds have been entered from the provinces of Alberta, Manitoba and Quebec. From a total of 579 cows entered, 124 certificates have been issued. Sixteen cows have two certificates to their credit, having produced the required amount of milk and butterfat two years in succession.

Poultry Division

The satisfactory condition of the poultry industry apparent in the last two years has been well maintained in 1927. While it is true that prices for eggs obtained by the producers have been high, the highest of any country in the world, and about three cents higher on the average than for the previous year, it is the remarkable freedom from fluctuation that has made the Canadian market peculiarly a producers' market.

Consumptive demand has been steady and this demand, in contrast to the old-time speculative demand for storage, has proven the dominant factor in maintaining the market at profitable levels. Experience in the last three years in Canada is proving beyond a doubt that the consumers' preference for quality in eggs functioning confidently through national standards is the true guide not only to profitable production but profitable trading as well.

Several factors occurred during the year which will have a lasting beneficial effect on the poultry industry:

The first was the final passing by all of the provinces of the enabling legislation making operative beyond question of a doubt the egg regulations as applied to domestic trading.

The second was the holding at Ottawa of the World's Poultry Congress and Exhibition. The congress did many things; not the least of these was the lasting impression made on the minds of the people of Canada of the magnitude and importance of the poultry industry.

To the visitor, two things stood out:

1. The soundness and breadth of the economic principles underlying the progress of the poultry industry in Canada as illustrated in the Canadian Educational Exhibit, and

2. The outstanding merit and vitality of Canada's poultry breeding stock, as viewed not only in the exhibition rooms proper but in the extensive exhibits of the British Columbia and other R.O.P. breeders' associations, these being not only one of the chief centres of attraction but the busiest place in the whole congress in point of business transacted.

Canada did extremely well in the Poultry Congress, and the problem now presenting itself is how best to capitalize the advantages gained.

From an export standpoint, the brightest opportunity at the moment is in the sale of breeding stock. Certain parts of Canada, more particularly British Columbia and Ontario, are doing well in this regard at the present time. Only recently have Canadians come to appreciate the real merits of the Prairie Provinces as a rearing ground par excellence for poultry. The production of 300-egg hens on the prairies has brought people to a realization of the possibilities of Manitoba, Saskatchewan and Alberta in a poultry breeding way.

In the export of eggs and market poultry, 1927 was an off year, very little poultry and only some small shipments of eggs going to Great Britain. Prices in Canada have been too high for export, and the firm, even tenor of the home demand has kept the home market above an export level. The market on eggs has been stronger than the market on poultry. It is expected, however, that as soon as the standards that are being prepared for dressed poultry are introduced they will react in the interests of the poultry market in much the same manner as has the standardization of eggs.

In brief, the achievements in the poultry industry of Canada in the last few years have been nothing short of phenomenal when it is considered that in a country of comparatively small population like Canada it has been possible in the last few years to increase the production by over 100 million dozen and still not have enough eggs to supply the home demand, as is evidenced by higher prices to producers, a reduced export trade, and little or no falling off in imports.

ADMINISTRATION OF EGG REGULATIONS

The very satisfactory condition of the Canadian egg trade referred to in the introduction to this report is due in a large degree to the standardization of egg grading throughout the Dominion. The effect has been most apparent in the increased home consumption. Canada leads the world in per capita consumption of eggs. Ten years ago per capita consumption in Canada and the United States was about the same, to-day Canadians eat ten dozen more eggs per capita per year than the United States, and from twelve to fifteen dozen more than Great Britain.

Consumers do appreciate and demand does respond to uniformly high quality in eggs.

Possibly the average consumer is more fastidious about eggs than other food products, for no product is possibly more quickly susceptible to favourable or unfavourable consumer demand. The fact is that with variable quality or with

uncertain quality, consumption did not increase. In the last few years with a standardized product, consumption has increased, and further, if the same uniformity in quality can be maintained and improved there is no reason why under present urban living conditions it should not still further increase and grow.

The following is a table of the increase in per capita consumption in eggs in Canada in the last ten years:—

PER CAPITA CONSUMPTION OF EGGS IN CANADA

—	Population	Production	Export	Import	Per Capita Consumption
					Doz.
x1901	5,371,315	84,132,802	11,363,064	951,745	15·1
x1911	7,206,643	123,071,034	87,420	2,926,856	17·5
1920	8,631,475	144,475,072	6,322,838	6,515,928	16·8
1921	8,788,483	193,049,154	5,444,014	6,582,739	22·1
1922	8,940,150	219,058,468	3,619,356	8,140,547	25·0
1923	9,416,457	227,186,508	2,900,111	6,623,253	25·4
1924	9,226,740	238,648,685	2,716,604	4,980,704	26·1
1925	9,364,200	249,778,867	2,466,270	3,726,311	26·8
1926	9,390,000	262,080,399	1,776,559	4,156,474	28·1
1927	9,519,000	278,277,227	448,206	4,576,671	29·67

xCensus
1920–27 Bureau of Statistics.

The egg regulations first became effective in the spring of 1918, the standards and inspection service covering only export and interprovincial trading at the time.

Inspection of imports was introduced in 1922 and the regulations extended to include domestic trading in 1923 and 1924. Before grading for the domestic market was adopted a nation wide experiment was undertaken to ascertain the response from the consuming public to a standardized product. Representative retailers in the principal urban centres were invited with Department assistance to test out the utility of the standards.

The merchant agreed for a period to sell eggs only in accordance with the Government grade. The department undertook to secure for the merchant a supply of eggs graded in accordance with the standards. Demonstrations of grading were arranged in the stores and suitable window displays provided. So great was the consumer response that those merchants who accepted the department's invitation not only doubled, trebled and quadrupled their sales, but increased their patronage for other supplies as well. It was upon this basis in fact that domestic grading was introduced.

The regulations affecting domestic trading embrace two distinct phases:

1. The sale of the graded product between dealers and to consumers.
2. Graded return to producers.

Under existing regulations the first of these has permitted of more fective administration. On the one hand there is a specific grade definition, the other, tangible evidence in candling, as to whether the quality is as presented. The graded return, however, has to do with bookkeeping and actual payment of moneys. In a word, the second has necessitated the pectors becoming detectives and accountants in addition to their knowle of eggs and the evidence even then can not be made as decisive as with actual quality of the grades to pass upon.

It is expected, however, with prospective amendment of the regulations hand that this phase of the administration can be materially strengthened.

The following tables show a comparison of the work of the inspection service for 1926 and 1927.

IMPORTS, 1927

—	Fresh	Storage	Total
Montreal	34,436	8,981	43,417
Quebec	9,564	.....	9,564
Ottawa	3,124	400	3,524
Toronto	22,378	8,655	31,033
Sault Ste. Marie	.....	200	200
Windsor	2,122	50	2,172
Nova Scotia	430	271	701
Misc. East	25	150	175
Winnipeg	5,815	.....	5,815
Vancouver	.....	1,947	1,947
Misc. West	1,222	514	1,736
Total	79,116	21,168	100,284

Exports have fallen off largely because of the higher level of prices in Canada and the very excellent condition of the home market.

The reduction in imports, approximately 18,000 cases, is very gratifying. The close scrutiny of the Egg Inspection Service has largely curtailed the importation of processed eggs from the United States. Processed eggs are eggs which have been subjected to a treatment of mineral oil, have then been placed in storage and either marketed in that condition or subjected to sandblasting to remove the oil. In the United States these eggs are being sold as fresh eggs and were represented to Canadian importers as being fresh. Under the Canadian regulations they must be sold as preserved, and this requirement has largely curtailed their importation into Canada. In instances where the samples drawn have been under doubt, recourse has been had to a chemical test.

The confidence which egg grading has established in the public mind has increased to a tremendous degree the demands for the Inspection Service.

In addition to the regular work of inspection by approval, the inspection staff have made approximately 30,000 calls on retail and wholesale dealers for the purpose of checking up their compliance with the regulations and correcting abuses and irregularities. They have also been engaged in giving lectures before student bodies, women's clubs, etc., and candling and grading demonstrations at all the principal exhibits throughout Canada, school fairs, boys' and girls' clubs, etc.

There were 90 prosecutions for infractions of the egg regulations during 1927, resulting in 86 convictions. Two cases were dismissed because of lack of confirmatory evidence, and two on technicalities.

CO-OPERATIVE MARKETING AND POULTRY PROMOTION

The egg and poultry co-operative organizations continue to gain strength and become more and more an increasingly important factor in the trade organization of the country. Their place in the industry is being more and more recognized by private enterprise and the return which they have been able to make to their members, as a result of the stable markets maintained, has greatly enhanced their standing both among their own members and producers as a whole.

In Manitoba and Saskatchewan the steps taken by the co-operative to enlist the sympathy and utilize the services of the local merchants as collecting media in the country have gone far to enlist good feeling and strengthen public opinion.

The officers of the Promoter Service have conceived and laid the foundation work for many of the successful egg and poultry co-operatives to-day, and frequently it has been necessary for these men to assume full direction of the activities until such time as the volume received was sufficient to warrant the appointment of a business manager.

The introduction of carlot shipment of live poultry is largely a promoter innovation, as is also live poultry grading. In many districts community hatcheries, backed by a system of approved flocks, have been introduced, and lately turkey approval work has been added to their other activities.

The establishment of egg grading stations, more particularly in Ontario, is serving a useful purpose in many sections in the sale of the graded product. It is the intention as well to include under the Promoter Service the dressed poultry inspection work.

During the year real endeavour has been made to co-ordinate more closely federal and provincial activities. Possibly the most striking illustration of the effectiveness of this program is apparent in the province of New Brunswick, where a careful planning of the whole policy for agriculture took place some two years ago. The part which each department and each man was to take was mutually agreed upon and the whole of the provincial and federal officers operating in that district co-ordinated in a most effective manner.

Having in mind the broad scope of the promoter work, the men in charge are instructed to give constant attention to the application of the two fundamental principles which form the bed-rock of every successful business—economical production and efficient marketing.

With these objectives before them, the promoters, through their thorough knowledge of conditions and public opinion in their districts, on one hand interpret to the department the needs of those districts, and on the other carry back and interpret to those districts departmental policy devised to meet those needs.

DRESSED POULTRY STANDARDS

The national conference convened in Winnipeg last January endorsed the principle of dressed poultry grading with the recommendation that the standards when prepared be made voluntary for one year before becoming legally effective. A committee which was appointed to complete the recommendations of the conference has held several meetings, and the intention is that not only will the standards be put into actual operation in 1928 in a voluntary way, but also that an intensive program will be undertaken leading to an increased consumption of Canadian poultry meat on both the home and export markets.

TURKEY APPROVAL

For some time past a feeling has existed in practically all provinces of Canada that too little attention has been paid to the development of the turkey industry. The ravages of disease, largely through the inability of the individual breeder to secure vigorous, healthy breeding stock has been largely responsible for this sentiment, and the feeling has gained decided strength since the organization of the large poultry marketing co-operatives. The operation of these organizations has served to focus attention on the fact that Canada was producing too few of the large, full-breasted birds demanded by the market.

The necessity for some policy is most apparent in the prairie provinces, in Ontario, and in Quebec. In a number of districts in these provinces steps have been taken to cull some of the best flocks and the results which have been obtained have made these flocks noteworthy as local centres for desirable breeding stock. Other districts also have learned of the utility of this stock and a demand for it has sprung up which is far in excess of the supply. The consider-

ations suggest the advisability of a national policy of turkey approval to encourage the production of better breeding stock. The possibilities of this work are very great, not alone from a domestic standpoint, but from an export standpoint as well.

EGG AND POULTRY MARKETS INTELLIGENCE

The market reporting work of the Poultry Division consists of the publication of daily and weekly reports, giving the prices and conditions on the egg and poultry markets of Canada, Great Britain and United States. Where possible services of officers of the branch are utilized in securing this information although in a number of centres it is necessary to engage independent organizations.

The chief development in the market reporting work in the past year has been the changing of the weekly report from a stencilled to a printed publication. The new report has met with much favour in the country. It is widely read and followed, and the circulation has increased rapidly.

RECORD OF PERFORMANCE FOR POULTRY

The distribution of vigorous males from high-producing strains to the farms of Canada is the most important factor in economical production. Some years ago when the export market was playing a much more important part in the up-building of the Canadian poultry industry than it is to-day, it was apparent that if Canada was to meet the competition on the British market of the many countries placing their product there it was necessary in addition to sending forward the highest quality possible to devise some means whereby the cost of production in Canada, the number of eggs per bird, and the number of eggs per pound of feed fed, would compare favourably with that of any other country. To this end, policies were devised that would identify in a definite manner the really worthwhile strains and families being developed by poultry breeders within the Dominion. The policy of Record of Performance was conceived primarily for this purpose and its growth and utility in the nine years of its existence is amply evidenced to-day in the greatly increased year-round production on the farms of Canada and the demand that there is for Canadian poultry breeding stock from practically every other nation in the world.

The utility and breadth of application of Canada's national breeding policies for poultry were shown at the World's Poultry Congress by a model which showed in the foreground typical male birds of high producing strains. On either side were exact reproductions of plants of typical Canadian breeders, backed by the experimental work of the colleges and the Experimental Farms. From the breeders' plants a stream of these cockerels was shown going back to the approved flocks, the breeding stations, and the community hatcheries from which emanate the great mass of eggs for hatching and day-old chicks to the farms of Canada.

A further endorsation of Canada's initiative and progress in this direction is the fact that since the visit to Canada, two or three years ago, of certain prominent British poultrymen there has been a persistent agitation in England for the adoption of a similar policy. In the United States, no less than eight states have already adopted a record of performance system and there is a determined agitation to give it a national status in a unified, administrative way, similar to that so effective in Canada.

As an indication of the popularity of this work in Canada the current entry in Record of Performance for the year 1927-28 consists of 38,371 birds, an increase of 35 per cent over the previous year. In this connection it is very noteworthy that the largest proportionate increase is in the Prairie Provinces, Alberta having more than doubled last year's entry. Nova Scotia has also

shown a great increase over last year; the number of breeders entered in British Columbia and Ontario is about the same, but both provinces show substantial gains in the number of birds entered.

EXHIBITS AND PUBLICITY

The various policies of the Poultry Division can only be of the greatest benefit to the country at large when their existence and value are given wide publicity and to this end the medium of exhibits at agricultural fairs has been widely used. During the past year exhibits have been sent to all the leading fairs in Canada and to a number of smaller poultry shows and the attendance and interest which has been displayed have amply justified the expenditure. A feature of exhibit work which has been given prominence during the year has been the staging of demonstrations on egg cooking. These have been given at the Canadian National Exhibition and the Royal Winter Fair at Toronto and the success which has attended the demonstrations there has warranted the extension of this feature to other shows. Practical and experienced demonstrators have been engaged and along with their demonstrations on the preparation of egg dishes they have explained fully the value of the egg regulations to the consumers. An inspector is present to give demonstrations on egg grading and it is found that through these two media the housewife is given a very forceful demonstration of the worth of the regulations.

The Canadian exhibit at the World's Poultry Congress has been acclaimed widely as perhaps the best of its type ever staged and portions from this exhibit will be used widely in the exhibits work of the Poultry Division during the coming year.

A publicity project inaugurated during the past year which has met with much success has been the issuance of publicity paragraphs on eggs. These paragraphs have been printed on slips suitable for enclosing in egg cartons and they have dealt with such subjects as egg grading, the food value of eggs and egg dishes in a way that would be most attractive to consumers. They have been distributed to the trade and producers at cost and have met with a very encouraging response, over a million and a half having been sold to date.

Sheep and Swine Division

SHEEP

The lamb crop in Eastern Canada was one of the best in the history of the industry. A good lambing season was followed by a summer which, while cool, was favourable for the growth and development of nursing lambs. A growing tourist trade stimulated the demand for early lamb and the eastern sheep producers were fortunate in finding a steady market for early lambs as they matured.

Western range conditions were unfavourable at the lambing season, but this was to some extent offset by a season with plenty of rainfall which kept the range pastures in excellent condition throughout the season. Range lambs were somewhat above the average in weight going into the feed-lot and required a shorter feeding period to bring them up to market weights.

Market prices were slightly lower during the greater part of the year than for the previous twelve months, but were sufficiently steady to maintain confidence. Interest in sheep raising has been good and the demand for breeding ewes exceeded the supply. The demand was good for pure bred rams, but was not sufficient to absorb all ram lambs. Breeders were advised to feed the surplus of ram lambs through to yearlings. During the year numerous shipments of sheep were exported to the United States and other countries. The raising of the embargo for a short period against imports from Britain, on account of foot and mouth disease, enabled Canadian importers to bring in

some new blood which will be helpful in the improvement of Canadian pure-bred flocks.

The wool clip was of choice quality, being bright, clean and strong in fibre. Wool prices were not high, but the movement was good with prices tending to higher levels. A large proportion of wool sales were made to British and continental buyers indicating that the grade and quality of Canadian wool is attracting wider notice on the world markets.

SHEEP FAIRS AND LAMB SALES

The Sheep Fair and Lamb Sale is more and more coming to be recognized as an essential factor in organized sheep-producing centres. The success which has attended fairs already held by districts from year to year is resulting in a steady demand for new fairs in other districts where organized production is in the process of evolution. The various improvement activities related to sheep extension and promotion work are culminated commercially, as well as educationally, in the Sheep Fair and Lamb Sales Policy. The docking and castration of lambs which have been recommended for years have now become fairly general in practice, in fact farmers are not allowed to exhibit undocked and uncastrated lambs at the sheep fair. Lambs exhibited and sold through the fairs on account of being ewes and wethers escape the cuts which have been instituted by the packing industry at the principal stock yards of the Dominion. A great many districts now realize the importance of the use of supplementary feeds and grain for the finishing of lambs, in order that the finish may be improved and the grade higher. A larger percentage of sheep fair lambs each year are going into the good to choice grades.

The sheep fair and lamb sale has provided the necessary demonstration to convince the farmer that it pays to uses a pure-bred ram and that, in addition, it is necessary to cull his ewe flock replacing undesirable ewes with ewe lambs of improved breeding. These fairs have demonstrated beyond doubt the economic saving through reduced marketing cost where several hundred lambs are marketed co-operatively. When a sufficient number of fairs are organized in the province, especially where the dates run consecutively, it is possible for lamb buyers to arrange to follow the fair schedule, thus developing greater competition in the buying of lambs at country points. Sheep fairs and lamb sales establish the local price for lambs in the districts in which they are held. As sheep fair lambs are of improved quality, the price established is always for a quality product and, hence, is the highest price that the market can afford to pay. Through the holding of these fairs a speculative element in marketing lambs has been to a large extent eliminated. Through the introduction of local competition in buying, the local sales committees are now able to gauge the competitive purchasing limits of buyers representing the different markets, sales being made to representatives at the marketing point which can pay the most money for a quality product.

Sheep fair organizations are becoming organized on a more permanent basis from year to year. Penning accommodation is being provided and where the fairs are held in conjunction with the country fair more adequate and modern pens are being provided. When the sheep fair and lamb sale is held in conjunction with the county fair, the sheep section is much larger and of greater interest and educational value to those in attendance at the fair. The lambs are delivered to the fair grounds before ten o'clock on the morning of the fair. Each farmer's lot is weighed as it arrives, the lambs being graded according to weight and as far as possible according to finish. Entries are made in groups of five or groups of ten. The judging is performed on the basis of correct market weights, uniformity, finish and type. The weighing of each group and the judging gives the various exhibitors an opportunity to study the good points and the poor points of the various entries. Further information regarding the judging may be obtained on request from the judges. The

class for ram and progeny provides ample material for demonstrating the importance of prepotency in sires. Pure-bred rams whose progeny stand high in the market classes are always keenly sought after as flock sires and in this way many useful lambs which previously went for slaughter are now being retained for breeding purposes as long as they remain useful.

As soon as the judging is completed, the sales committee for each fair proceeds to sell the lambs. Many of the fairs have adopted the policy of selling by public auction to the highest bidder, a method which seems to give general satisfaction, as it permits of competitive bidding by both local and outside buyers. The lambs are sold according to grade, the No. 1 lambs being sold first, followed by No. 2 lambs and the culls. It has been found most profitable to sort out the feeders and culls in order that they may be offered for sale to local buyers. The demand for choice ewe lambs for the establishment of new flocks is growing from year to year. The sales committees endeavour to ascertain the probable number of ewe lambs that are likely to be required for prospective buyers of breeding stock and these are sorted out as the lambs are delivered in the morning. Breeding stock is offered for sale in lots to suit prospective buyers. The selection of suitable ewe lambs for breeding purposes and the encouragement of their sale locally is perhaps one of the most valuable features of the lamb sale. Grants for the sheep fairs and lamb sales are provided by the federal and provincial Departments of Agriculture. Each fair has the necessary organization which is assisted by the promotion staffs of the federal and provincial departments. Additional money for special prizes is secured from donations by the local citizens or organizations who are interested in the development of the sheep industry. In 1927, 123 sheep fairs were held at which 43,700 lambs were sold. The lambs as marketed averaged between 80 and 90 pounds for the various provinces.

PURE-BRED RAM PREMIUM POLICY

It is doubtful if any policy had done as much to influence the purchase of pure-bred rams as the Ram Premium Policy. Since its inception in 1919 something over 10,800 rams have been purchased by farmers who had not previously used a pure-bred ram. The usefulness of the policy even at this date is evidenced by the fact that in 1927, 1,178 second premiums were paid and 1,525 first premiums were accepted. The policy is now definitely responsible for the establishment of new sheep-breeding centres each year. Such districts through the use of one breed of rams are making steady progress in the grading up of their ewe flocks. Market lambs are also showing greater uniformity from year to year. Exchange of rams is facilitated, thus reducing overhead expense for purchase of sires. Dipping of flocks which is being practised for the first time is effecting a great saving in feed to say nothing of added comfort, improved wool and better lambs. Docking and castrating are also adding to the appearance and marketability of the lamb crop from year to year.

The following tables show the extent to which the policy is applied in the various provinces, also the number of rams of the various breeds for which application is made:—

RAM PREMIUM POLICY—1ST PREMIUMS—1927

Breed	P.E.I.	N.S.	N.B.	Que.	Ont.	B.C.	Total
Shropshire	9	33	.....	346	26	6	420
Oxford	.....	9	.....	579	46	.....	634
Leicester	.....	.....	.....	213	10	.....	223
Hampshire	.....	.....	.....	202	.....	.....	202
Cheviot	.....	.....	.....	22	.....	.....	22
Lincoln	.....	.....	.....	13	.....	.....	13
Cotswold	.....	.....	.....	11	.....	.....	11
	9	42	.....	1,386	82	6	1,525

2ND PREMIUMS ON RAMS BOUGHT IN 1926

Breed	N.S.	N.B.	Que.	Ont.	Total
Shropshire	15	2	313	.....	330
Oxford	16	6	490	14	526
Hampshire	.....	.....	94	.....	94
Leicester	.....	.....	192	.....	192
Cotswold	.....	.....	13	.....	13
Cheviot	.....	.....	23	.....	23
	31	8	1,125	14	1,178

BOYS' AND GIRLS' SHEEP CLUB POLICY

This policy, which was approved in 1927, has been generally popular throughout the Dominion. During its first year eleven clubs were organized and to date clubs organized under this policy have been responsible for the establishment of over one hundred new sheep flocks in the Dominion. Sheep Clubs are already commencing to be a big factor in creating further interest in sheep raising.

Sheep club members have the co-operation of the Canadian banks in providing loans for the purchase of ewes or fencing subject to the regulations of the policy.

The selection of a sheep club district usually rests with the district field man or promoter and the selection is usually based on his knowledge of the district, its adaptability for sheep raising and the aptitude of the farmers or young people towards live stock.

Having decided upon the district it then becomes necessary to interest a minimum of ten junior farmers or boys and girls in the keeping of a flock of sheep. This means personal contact work and the natural ability on the part of the promoter who does it to sell the idea of sheep raising to the people with whom he comes in contact. As soon as the ten or more have agreed to establish sheep flocks, the formation of a sheep club is assured. The initial step is to call a meeting of all interested parties and organize the club, electing the various officers, including the advisory committee.

At the organization meeting the breed question has to be settled as all the members must agree to raise the same breed of sheep. Matters such as buildings, fencing, cost of ewes, date of puchase and financing of individual members will come up at the organization meeting. In the event of a number of the members requesting a loan from the bank to finance the purchase of ewes or the building of fences, it at once becomes necessary to interest the local bank manager. The promoter has to see to it that the necessary fencing and housing accommodation are provided on each farm before the ewes are purchased and made available for distribution.

When the preliminary organization details have been attended to and the ewes have been bought and distributed to club members, they are given very close personal supervision for the first year after the flock is established. This includes direction during the breeding season, instruction in feeding and management during the winter months, care at lambing time, a shearing demonstration, docking and castrating demonstrations, dipping demonstrations, instruction and control of parasites and any other phase of the sheep industry which the new beginners should know in order to handle the flocks carefully and get the best results.

Many sheep club members have had remarkable success in their sheep flock enterprise during the first year.

RAM GRADING

Graded rams continue to be in demand in all provinces where the ram-grading policy applies. Buying either by individual farmers or by associations for interprovincial trade or for export is rapidly reaching the point where transactions are made on the basis of XXX and XX standards. Demand for XXX rams continues to increase and is particularly noticeable in a year like the one just past, when there was a surplus of medium-quality stock. With increased competition in the breeding of pure-bred stock it is becoming increasingly necessary for pure-bred sheep breeders to cull out undesirable breeding ewes and maintain an approved sire whose breeding record is known at the head of the flock.

The grading of rams is now performed in eight out of the nine provinces. A total of 3,006 rams were graded in the present fiscal year.

WOOL GRADING

Centralized wool grading was again carried on at Weston, Carleton Place, Lennoxville, Fredericton, Truro, Charlottetown, and at several points on Manitoulin Island. Wool graders were again provided to handle the co-operative consignments of wool shipped for co-operative sale. The volume of wool graded in 1927 was somewhat larger than that handled in 1926. Canadian wools continue to show improvement in their preparation for market, the fleeces being well rolled and tied and the clip as a whole showing a very small percentage of rejects or low-grade wools. The growers were again charged with one-tenth of a cent per pound for grading service. The active demand which pertained throughout the year made it possible to move graded wools freely into the Canadian trade and for export purposes at prices slightly in advance of the previous year. The following table shows the amount of wool graded by provinces in 1927:—

Province	Range	Western Domestic	Eastern Domestic	Total
British Columbia	58,537	210,942	.....	269,479
Alberta	1,154,145	338,036	.....	1,492,181
Man. and Sask.	226,557	434,705	.....	661,262
Ontario	.....	.....	656,816	656,816
Quebec	.....	.....	91,427	91,427
Nova Scotia	.....	.....	61,175	61,175
New Brunswick	.....	.....	18,286	18,286
Prince Edward Island	.....	.....	29,986	29,986
Sundry Shipments	43,221	.....	324,421	367,642
	1,482,460	983,683	1,182,111	3,648,254

PURE-BRED RAM CLUBS

To date a total of 103 ram clubs have been organized, six new ones being organized in 1927. Replacements for clubs already organized and rams required for new clubs organized amounted to 1,386 head.

Farmers in the district where Ram Clubs have been organized are coming to recognize the importance of the pure-bred sire in flock improvement and increased value of market lambs, so that it is only a matter of time until the pure-bred sire will be used on every flock in these districts.

SWINE

The past year was not as satisfactory to hog raisers as the previous one. Prices were considerably below the average of last year and although feed prices

have been considerably lower the margin of profit has narrowed to the point where only a small profit remains. The number of hogs marketed will show an increase of between 175,000 and 200,000 head. This increase was anticipated as a result of the relative margin between feed and hog prices which existed last year and which made pork production particularly profitable. This increase is noted in every province in the Dominion, with the largest increase in the western provinces. The year's increase is divided approximately as follows: Alberta, 20 per cent; Saskatchewan, 29 per cent; Manitoba, 16 per cent; Ontario, 25 per cent; Quebec, 7 per cent; Maritime Provinces, 3 per cent.

While there is a lot of hog feed available, particularly in Saskatchewan and Alberta, certain areas are short, particularly the province of Manitoba, where the oat and barley crops were almost a complete failure. At the moment hog prices are not satisfactory in relation to feed prices and unless there is a turn upwards during the fall months breeding operations will likely be curtailed.

There has been a surprisingly good demand for good breeding stock of bacon type. This is particularly true in the province of Alberta. Quebec province also shows considerable improvement in this respect. There are still too many young boars being used, but farmers and associations are gradually coming to appreciate the necessity for keeping in service tried sires of the desired type with good breeding records. The present period of narrow profits has seen less reaction to lower prices, thus indicating that swine production is becoming more stabilized.

The hog runs at the various stock yards are now showing decided bacon tendencies, indicating that the bulk of commercial hogs are out of bacon-breeding stock.

The export bacon market during the past year has been extremely unsatisfactory to Canadian shippers. Decreased purchasing power in Britain, accompanied by increased supplies coming forward from continental Europe has kept bacon prices at a relatively low level when compared with hog prices on this continent. This condition has made it almost impossible for Canadian packers to remain in the export business, consequently hog prices in Canada have been in continual adjustment with those in the United States. Fortunately, the quality of Canadian bacon is beginning to attract attention in the United States and our decrease in exports to Britain has been partly offset by increased exports to the south. Furthermore, consumptive demand in Canada has been maintained at its maximum or near it, with some increase due to to consumption resulting from the tourist trade.

HOG GRADING

Early in the year the department called a conference of the packers, the producers' representatives, and provincial and federal officials to review the work being done under this policy. No general review of the work had taken place since the 1921 Swine Conference, when it was agreed that the basic price for hogs would be set on the thick smooth grade and that a minimum premium of 10 per cent over the basic price would be paid in favour of the select bacon grade. The 1927 conference dealt more particularly with the question of premiums and differentials. The meeting again approved of the principle of hog grading and felt it essential that the policy should be maintained and that it receive the support of the packing industry to the extent of purchasing and settling on a graded basis to as great an extent as possible, such graded settlement to provide as large a differential in favour of bacon hogs as is economically sound. The conference also decided that the initial differential between select and thick smooth prices should be one-half cent per pound and that this

differential should be reviewed from time to time by the Joint Swine Committee. The conference further thought it necessary that steps be taken to insure that the information regarding grade be carried back to the producer.

To give effect to this recommendation, the department by Order in Council P.C. 1787 amended Regulation 11, so as to make it necessary for drovers to either grade or mark for identification hogs purchased at country points. This new regulation has only been put into effect in Eastern Canada as the limited staff made it impossible to take care of the additional work involved all over the country. It is intended to apply this regulation to Western Canada as soon as the introductory work in the East is completed. Since September 17, 1927, the packers have been buying all hogs on a graded basis. This in conjunction with the introduction of the new regulation has tended to put hog grading on the best basis since its inception in the fall of 1922.

HOG GRADING AS SHOWN BY PERCENTAGES 1923-1927

YARDS AND PLANTS COMBINED

Where graded		Select Bacon	Thick Smooth	Heavies	Extra Heavies	Shop Hogs
Alberta	1927	6·16	74·05	4·03	0·43	4·00
	1926	5·55	72·79	3·29	0·50	4·45
	1925	3·53	70·85	2·08	0·32	14·45
	1924	3·60	76·21	4·39	0·47	7·21
	1923	2·33	73·33	2·75	0·33	13·28
Saskatchewan	1927	5·35	67·50	6·05	1·52	4·05
	1926	4·95	69·71	6·56	2·14	2·11
	1925	5·04	59·02	3·89	1·15	16·96
	1924	3·99	59·05	6·01	1·43	14·26
	1923	4·10	69·45	7·28	2·13	18·09
Manitoba	1927	11·08	56·62	5·10	1·76	7·42
	1926	8·15	58·26	6·55	2·03	8·42
	1925	5·52	55·23	3·95	1·24	24·52
	1924	3·92	56·51	4·88	1·40	21·14
	1923	6·69	62·31	7·11	1·98	7·09
Ontario	1927	25·92	60·33	4·29	0·34	5·13
	1926	24·91	60·28	5·63	0·59	4·40
	1925	24·80	61·02	4·01	0·43	5·35
	1924	23·01	57·75	3·73	0·33	9·13
	1923	20·78	57·75	6·20	0·51	10·13
Quebec	1927	11·41	56·71	3·26	0·85	23·17
	1926	11·11	57·08	2·67	1·26	21·59
	1925	13·94	53·60	2·38	0·77	23·77
	1924	13·07	46·72	2·88	0·69	30·00
	1923	16·49	43·56	4·03	0·52	29·63
N.S., N.B., P.E.I.	1927	37·88	42·24	3·33	0·53	13·11
Canada	1927	17·46	62·17	4·34	0·69	7·17
	1926	15·66	62·56	4·94	0·95	7·18
	1925	15·20	60·99	3·41	0·61	13·15
	1924	14·52	59·75	4·00	0·60	13·37
	1923	11·97	59·13	5·45	0·70	13·09

HOG GRADING AS SHOWN BY PERCENTAGES 1923-1927

YARDS AND PLANTS COMBINED

Where Graded		Lights and Feeders	Roughs	No. 1 Sows	No. 2 Sows	Stags	Total Hogs
Alberta	1927	7·87	0·39	1·85	1·09	0·13	100
	1926	8·72	0·48	2·64	1·46	0·12	100
	1925	4·33	0·35	2·39	1·55	0·15	100
	1924	3·70	0·33	2·76	1·22	0·11	100
	1923	4·28	0·30	2·24	1·04	0·12	100
Saskatchewan	1927	9·20	0·37	4·14	1·45	0·37	100
	1926	7·40	0·31	4·60	1·95	0·27	100
	1925	8·69	0·32	3·11	1·53	0·29	100
	1924	6·90	0·28	5·39	2·43	0·26	100
	1923	3·00	0·35	3·67	1·62	0·31	100
Manitoba	1927	12·44	0·18	3·24	1·93	0·23	100
	1926	10·04	0·15	3·75	2·40	0·25	100
	1925	4·39	0·11	3·21	1·61	0·22	100
	1924	5·36	0·14	4·71	1·80	0·14	100
	1923	9·24	0·27	3·46	1·60	0·25	100
Ontario	1927	2·07	0·04	0·41	1·35	0·12	100
	1926	1·73	0·07	0·38	1·82	0·19	100
	1925	2·16	0·05	0·37	1·64	0·17	100
	1924	3·88	0·07	0·49	1·50	0·11	100
	1923	2·72	0·06	0·39	1·34	0·12	100
Quebec	1927	1·76	0·07	0·53	2·10	0·14	100
	1926	1·89	0·10	1·01	3·10	0·19	100
	1925	1·45	0·06	0·92	2·95	0·16	100
	1924	2·29	0·09	1·16	2·86	0·15	100
	1923	2·20	0·22	0·55	2·65	0·15	100
N.S., N.B., P.E.I.	1927	0·82	0·00	0·85	1·15	0·09	100
Canada	1927	5·07	0·15	1·33	1·47	0·15	100
	1926	4·71	0·18	1·63	2·01	0·18	100
	1925	3·13	0·13	1·42	1·78	0·18	100
	1924	3·98	0·14	1·82	1·70	0·12	100
	1923	3·67	0·16	1·17	1·52	0·14	100

The above table shows the percentage of each grade of hogs for the past five calendar years in each province in the Dominion and also summarizes these figures for Canada as a whole.

Statistics now cover five complete years of operation under this policy and reveal a steady improvement in quality. Unfortunately, the actual improvement in quality can not be fully presented by a statistical record as the average quality of the hogs in the Thick Smooth grade is now very much higher than in 1923.

BOYS' AND GIRLS' SWINE CLUBS

The Boys' and Girls' Swine Club Policy even after seven years of operation continues to be a big factor in swine improvement in the provinces of Prince Edward Island, New Brunswick, Nova Scotia, Manitoba, Saskatchewan, Alberta, and British Columbia. In these provinces, with the exception perhaps of Prince Edward Island, the demand for Swine Clubs continues to increase and as a result of clubs the community breeding of bacon type hogs is being established throughout these provinces. Following the organization of Swine Clubs, hog raising has been introduced on many farms where hogs were not previously kept. Much new interest has been created in the raising of bacon hogs and in the older clubs,

through the activities of members, the breeding of hogs has now reached the point where regular shipments to market are being made of hogs a high percentage of which are in the select bacon grade.

Each spring the Swine Clubs are responsible for the distribution of a large number of richly bred bacon type gilts. In most cases gilts are retained and become brood sows on the farms in which they are placed. Swine Club members are visited from time to time when such matters as proper feeding rations, feeding of dairying by-products, the growing of green feeds, proper location of pens and the provision of outside hog yards are discussed. In so far as possible members are kept advised of the progress which various members of their club and other clubs are making and in this way confidence is created and interest is maintained in the development and finishing of hogs at correct market weights. The improvement in the type of hogs marketed, from swine club districts, is the best testimonial for the effectiveness of this policy in laying the foundation for improved conditions as applied to both breeding and marketing practices.

The local Swine Club Fairs were again held during the year in each Swine Club district. These are proving a greater success each year as in addition to providing a medium for educational work in demonstrating hog grading, finish and market values, they are gradually demonstrating the importance of breeding operations so that carloads of hogs of the proper type can be offered for sale at regular and stated intervals. Each member exhibits a pair of hogs and in the older clubs where brood sows are kept litters of finished hogs are exhibited. In this way the members and parents have an opportunity to study the results of careful feeding and management. The importance of breeding is not overlooked and members who stand high in the classes at the various hog fairs invariably have no difficulty in selling their good female stock for breeding purposes to farmers in the district. The Swine Club Fairs also develop a knowledge in the art of exhibiting pigs and each year a larger number of Swine Club members are gaining sufficient confidence and experience to enter their stock for competition at county and other larger fairs. In addition to practical suggestions on feeding and management, Swine Club members are given instruction on the judging of hogs during the summer months, and at the local fair the members of each club compete in a judging competition. The two best judges from each club constitute a team to enter the Inter-Club Judging Competition for the province, this competition being held at a central point in each province. The Canadian National Railways and the Canadian Pacific Railway give the winning teams in the various western provinces free transportation to the Central Judging Competition and the winning teams for each province are the guests of the railways at the Royal Winter Fair, Toronto, where they again compete in a competition which includes judging and the giving of a demonstration on the export bacon market. As a result of judging work many Swine Club members are being trained in the art of judging. The trip to the Central Judging Competition gives at least two members from each team in each province a personal contact with the agricultural representatives and stockyard marketing facilities, while the trip to the Royal Winter Fair gives the winning team in each province an opportunity to visit the best live stock exposition on the North American continent.

In 1927 the swine clubs marketed fifty-six carlots of finished market hogs. Decker Swine Club in Manitoba had the distinction of again producing a carload of hogs with 100 per cent selects. Roland Swine Club in Manitoba also produced a carload with 100 per cent select bacon hogs.

The following table gives the number of carloads and the total number of hogs, and the percentage of select bacon hogs marketed by provinces:—

Province	No. of Clubs	Carlots Marketed	Total Hogs Marketed	Per cent Select Bacon Hogs
Prince Edward Island	3	3	89	60·1
Nova Scotia	25	22	867	57·0
New Brunswick	32	3	163	39·2
Manitoba	33	12	994	54·1
Saskatchewan	11	3	184	27·1
Alberta	17	13	881	24·8
British Columbia	9	.....	83	.....

The assistance in organizing and directing of Swine Clubs is taken care of by the agricultural representatives and agronomists of the provincial departments. Supervision and personal contact are carried on co-operatively between officials of the Dominion Live Stock Branch and the provincial Departments of Agriculture. Prize money for the local fairs is contributed one-third by the Dominion Live Stock Branch and two-thirds by the provincial Departments of Agriculture and the local districts. Prize money for the Inter-Club Carlot Competition and the Inter-Club Judging Competition is contributed by the Dominion Live Stock Branch.

BACON HOG FAIRS

Bacon Hog Fairs have continued to further swine improvement work, particularly in the provinces of Ontario, Quebec and Prince Edward Island. In the province of Quebec Bacon Hog Fairs are held in conjunction with Bacon Hog Clubs. These are authorized in districts where farmers' clubs have been organized and where approved boars are in use in the club district. Each Bacon Hog Club to qualify must market at least one carload of commercial hogs through its Bacon Hog Fair. In the provinces of Ontario and Prince Edward Island the Bacon Hog Fairs are organized in districts where it is considered necessary to revive interest in the keeping of bacon type hogs. Furthermore, they may be held in different seasons of the year with a view to influencing the period of hog marketing for the particular districts in which they are held.

These fairs make provision for both market and breeding classes and the prizes are derived from equal grants from the Dominion and provincial Departments of Agriculture, supplemented by local contributions.

The market classes are graded by an official grader as they are brought into the fair and the judging of both market and breeding classes is performed in such a way that the fullest and most complete information is available to all in attendance.

Through the Bacon Hog Fairs, community breeding of hogs is being definitely applied. In addition to featuring the production of market and breeding stock, they focus interest in prolificacy in brood sows, thrift and vigour in offspring, economy in production and ideal market weights and finish. The fairs also provide a medium through which farmers can purchase good gilts without going to excessive expense or trouble. Where possible Bacon Hog Fairs are held in conjunction with county or local agricultural exhibitions. As progress in community enterprise develops, it is expected that they will become established as a local institution operating on a self supporting basis and continuing to serve the farmer as a medium through which a high standard of quality will be maintained in the swine breeding stock of the community.

The following table indicates the number of Fairs held in 1927, together with the number of hogs marketed and the grading of same:

No. of Fairs	Market Classes	No. Selects	Per cent Selects	Price Received
Ontario—10	1,407	635	45·1	$9.10–$11.00
Quebec—60	6,447	1,334	20·7	8.10– 13.00

PURE-BRED SOW CLUBS

The Province of Quebec was the first province to organize pure-bred sow clubs. In the province there were a number of districts where there was practically no pure-bred stock and the swine breeders' association felt that it would be a distinct advantage to organize a group of pure-bred breeders in each of these districts. Accordingly eight of these clubs were organized in 1927, and twenty pure-bred Yorkshire sows were placed by purchase with farmers in eight different districts. The Swine Breeders' Association, the Provincial Department of Agriculture and the Dominion Live Stock Branch contributed equally towards prize money for the Club Fairs which were held in the fall.

At these fairs the sows were judged according to bacon standards. Many of the sows showed excellent development, good bacon conformation and plenty of breed character at the time of the fairs. A small percentage indicated a general lack of quality and type as required in pure-breds and a recommendation was made to the owners that such stock be sold for slaughter and replaced with pure-breds of approved quality.

It is probably too soon to make definite forecasts as to the future of these clubs. Present indications, however, point to the establishment of upwards of one hundred new breeders, many of whom are likely eventually to take an important place as pure-bred breeders of bacon-breeding stock in the province.

ADVANCED REGISTRATION FOR PURE-BRED SWINE

During the past few years, officers of this division have endeavoured to secure information which would make it possible to develop recognition for breeding stock that has proved its ability in the production of bacon hogs. The idea of a central testing station was tried out but the lack of detailed information relating to the breeding capacity of the stock submitted to test and also the lack of a proper means for correlating the information that was obtained, made it impossible to announce a program of work along this line, which would be satisfactory to conditions in all parts of the Dominion. For some time past, valuable information has been and is now being secured on the relative merits of breeding stock, by analysis of hog grading statistics. This has been developed in some districts with a view to showing the percentage of selects from the various boars in the district. This work has accomplished considerable good and has been made effective largely through the co-operation of various provincial organizations. The bacon hog competitions and conferences which were held at different points in the Dominion were also intended to direct the attention of breeders along the lines of performance in their breeding stock. It is interesting to note that in one competition, which was held in the fall of 1924, ten out of the fifteen prize-winning pairs in the carcass competition were either sons or daughters of grandsons and granddaughters of a certain boar. This fact thus revealed resulted in a keen demand for the progeny and descendants of this boar and was the result of a material improvement in the commercial hogs produced over a considerable area.

The question of evolving a practical policy which would encourage the building of authentic informative records concerning our pure-bred breeds of hogs was also before the Joint Swine Committee for some time. This committee after considerable study of the many problems involved, recommended to the department the establishment of an Advanced Registry Board for pure-bred swine, to work with officers of the department in developing such a policy.

As a result of the work already done, the department was impressed with the need of some policy which would be continuous and would result in the establishment of a permanent and informative record concerning our pure-bred swine. Furthermore, it was obvious that before any seal of approval could be placed upon breeding stock by means of special registration, information is required about the offspring of such animals, on the points of prolificacy, fecundity, hardiness, suitability of type and conformation and capacity to lay on flesh for a small amount of food. The lesson from Denmark demonstrates the vital importance of studying the methods of animal testing in all their bearings. The plant breeder, before he can compare the genetic yielding capacity of different varieties, has to study and evolve a satisfactory technique. There are certain factors which interfere with the accuracy of animal testing, and corrections for these must be determined and applied, so that the work which is carried out for the practical information of breeders can be interpreted in its proper way. The department therefore felt that it would be advantageous during the experimental development of such a policy, to have associated with the work representatives of the various interests concerned with improved registration.

The recommendation of the Joint Swine Committee was consequently accepted and a special board was formed on the invitation of the department. This board is under the chairmanship of the Chief of the Swine Division of the Live Stock Branch and is composed of the Dominion Animal Husbandman, two or three swine breeders, a representative of the National Live Stock Records Committee, a representative of the Industrial and Devlopmnt Council of Canadian Meat Packers, and a secretary appointed from the officers of the Live Stock Branch. Its duties are to draft a policy and to advise the department in regard to its development and administration, the responsibility for which in the first instance rests with the chairman of the board.

This board has recommended the initiation of an experimental policy for pig testing and recording as the basis for Advanced Registration of Swine in Canada. The policy is to be experimental in its preliminary stages, inasmuch as opportunity will have to be provided for the establishment of corrections in accordance with the experience and information obtained. Furthermore, the practicability and advisability of incorporating record of performance data on our official pedigrees can thus be definitely determined.

The board's proposals have received the approval of the Department of Agriculture and a supervising inspector is being appointed to take charge of the work with such additional temporary help for inspection as is necessary. The department is also providing for the payment of express on pigs sent to slaughter tests, the purchase of stationery and equipment and the travelling expenses of inspectors and certain members of the board. It is proposed that these charges be kept at a nominal figure during the experimental stage of the policy, but the information thus obtained as to costs will prove of value in a future estimation of the practicability of this type of work.

BACON GRADING

Conditions in Britain during the year were not conducive to the introduction of a definite policy in connection with the standardization and grading of products for export. In view of the increased exports to the United States, with an ever-increasing tourist trade in Canada, some attention has been given to

devising ways and means whereby the merchandising of Canadian pork products could be improved within the Dominion and at the same time permit of greater popularization with the United States tourists. Steps are being taken to collect information fundamental to such a project. The British market during the close of the year has shown increased strength and it may be found advisable on the re-establishment of our trade with Britain to apply a policy of standardization already worked out, backed by advertising and publicity.

SHEEP AND SWINE DEMONSTRATION WORK

The amendment of the Hog Grading Regulations requiring drovers either to grade their hogs or, in lieu thereof, mark each individual farmer's lot, necessitated a large amount of additional hog grading demonstration work at country points, preparatory to drovers and shippers undertaking hog grading on their own account in accordance with the Hog Grading Regulations. As a result of this demonstration, work drovers have been trained in the art of hog grading practice, and upon assuming responsibility for grading under the regulations, have become regular and individual educational factors in educating the farmer as to the quality of his hogs in relation to the official grades. Local grading has also brought about a closer degree of purchase and sale on a graded basis at country points.

Local hog grading demonstrations and local grading on the part of drovers have done much to stimulate further the introduction of better breeding stock and a consequent improvement in the quality of commercial hogs.

The establishment of many new flocks of sheep on farms and ranches has developed a demand for a large amount of demonstration work at country points. While a great deal of the country has been covered in so far as demonstrations on dipping, docking, and castrating as well as sheep shearing and the preparation of wool for market are concerned, there is still much of the country that requires instruction and advice on these matters. The cuts on undocked and uncastrated lambs which now apply at stock yard centres have resulted in many farmers attempting to trim their lambs without expert advice and in a great many cases this has resulted in loss. In other cases farmers are diffident about performing these operations unless shown how and, in consequence thereof, there has been very little slackening off in the demand for these demonstration services.

The construction of hundreds of concrete dipping tanks has demonstrated that the permanent tank and community dipping is the most effective means of keeping the farm flock free of ticks and other external parasites. The low cost and serviceability of the concrete tank has stimulated the demand for their construction and, in consequence thereof, the present staff is hardly able to take care of the requests that are received from sheep-breeding districts for directions along this line. When dipping is done cheaply and effectively, farmers realize that it is essential for the production of good market lambs and better wool. The practice of annual dipping is now becoming general in many districts, especially those that have permanent tanks and where dipping demonstrations have been held. The expansion of the sheep industry is tending to create a bigger demand for sheep shearing demonstrations and instruction on the proper methods of preparing the fleeces for market. In order that the number of expert sheep farmers might be increased in the country, a number of special classes were held, these being well attended. Students from these classes are now contracting for sheep-shearing work in a number of districts, and where they operate the fleeces are properly rolled and tied. Encouragement is being given towards the organization of carlot shipments, thus reducing market expenses and tending to stimulate the consignment of wool for grading and co-operative sale.

SHEEP AND SWINE MARKETING COURSES AND SPECIAL MEETINGS

Series of sheep and swine marketing courses were again held during the year. Farmers in Eastern Canada were interested in the application of the new hog grading regulations requiring the local grading of hogs or in lieu thereof the marking of each farmer's lot of hogs, and this feature of the program no doubt accounted to some extent for the increased attendance at swine courses. Another feature which added much to the attractiveness, educational value, and general interest of both sheep and swine marketing courses was the demonstration cars supplied by the Canadian Pacific and Canadian National Railways in the province of Ontario. These cars made it possible to carry market classes of both sheep and hogs for the various courses. Demonstration material and all necessary equipment were available at all times.

These courses commence in the late fall, extending through until April. The program for the most part covers two days, although numerous courses are held of one-day duration. In Ontario many of the courses were held in conjunction with the regular short courses organized by the Ontario Department of Agriculture. The program for the first morning in the case of sheep usually consists of lectures and discussions on sheep raising in general, the breeds of sheep and points in connection with the establishment of flocks, feeds and feeding. At swine marketing courses, the first morning is usually devoted to a hog-grading demonstration, particularly where the date of the course has been arranged to coincide with a regular hog-shipping day. This gives the farmer an opportunity to study market requirements and market type in hogs, as well as getting acquainted with the official grades of hogs. Other matters dealt with at the sheep courses are: flock improvement and the production of market lambs, lamb grading, finishing for market, wool grading and co-operative wool marketing, the grading of lamb carcasses and how to cut a lamb carcass for the retail trade. Demonstrations are also given on shearing, dipping, docking, and castrating. At the swine marketing courses, markets at home and abroad are discussed in detail. Judging classes are used to demonstrate the type and quality of breeding stock necessary for the production of select bacon hogs. Feeds and feeding, including rations for the growing pig as well as rations for finishing purposes, buildings and equipment, and practical suggestions in hog management are also dealt with. Such courses appear to be of special interest to farmers, particularly now that the grading and co-operative sale of both hogs and lambs make it possible to relate market conditions back to the individual farmer in terms of dollars and cents. The demand for marketing courses and meetings was larger than ever in 1927 and the attendance reached as high as 300 at certain courses.

During the year a great many special and regular meetings were held in the various provinces. These meetings are called for the purpose of dealing with the application of policies, the organization of clubs and associations, organization of sheep and bacon hog fairs, the initiation of hog grading and other matters pertaining to the sheep and swine industry.

CO-OPERATIVE SHEEP AND SWINE MARKETING

The organization of co-operative live stock shipping associations continues to be an important phase of sheep and swine promotion work. In the Maritime Provinces, the organization of the Maritime Co-operative Live Stock Marketing Board has culminated in a centralized marketing organization, the live stock shipping interests of the three Maritime Provinces. Shipping clubs in each of the provinces which have been developed or local units still retain their local identity and in addition are represented through the Board of Directors in the Central Organization.

In all three provinces, promoters have done a great deal of personal contact work in order that the larger idea of central marketing might be developed in the minds of the farmers, thus resulting in the union of existing clubs and the organization of new live stock shipping centres.

In connection with live stock pooling in western Canada, there have been many problems confronting co-operative shippers, such as centralized grading and selling, shrinkage in transit, weighing at country points, careful handling by all interests connected with live stock marketing, a development of export markets and other problems requiring investigation which are local to Western agriculture. The sheep and swine promoters in these provinces have been actively associated with research as pertaining to all these problems.

In new districts and in outlying sections of provinces east and west, it has been necessary in numerous cases to introduce breeding stock or supplement stock already in the district with a view to stimulating production to the point where co-operative shipping associations could function to the benefit of the farmer. As a result of promotion activities, co-operative sheep and swine marketing is being extended to many new districts.

SIRE LOAN POLICY FOR RAMS AND BOARS

Loans of rams and boars were restricted to special districts and special circumstances. In Alberta loans of both rams and boars were rather heavy, due to a demand from foreign-speaking settlements for bacon type boars and pure-bred rams. Similarly, in Manitoba, loans of rams in particular were required in districts suffering from poor crop conditions. Sheep Clubs and Swine Clubs received loans to meet club requirements. There are at present 204 rams and 261 boars on loan.

SIRE PURCHASE POLICY FOR RAMS AND BOARS

Assistance in the purchase of breeding sires is a service which individual farmers and associations are coming to use more and more. In the province of Quebec ram purchasing delegates are appointed by clubs or districts and when orders for twenty-five or more pure-bred rams are required the purchasing delegate is able to reduce purchasing cost and at the same time secure better average quality of stock for the district. The newer and northern sections of the province find individual purchasing of live stock too expensive and are resorting more and more to the service which the promoter can render by purchasing through the Sire Purchase Policy. Closely associated with the purchase of rams and boars has been the selection and purchase of brood sows and breeding ewes. The policy is particularly adapted for newer districts or those distant from pure-bred breeding centres.

SHEEP AND SWINE EXHIBITS

Boys' and Girls Sheep Clubs were a special feature of the sheep and swine exhibit at the Canadian National and Royal Winter Fair, Toronto. The inside stationary exhibit which covered the Western Class "A" Fair circuit featured the necessity for developing a national liking for Canadian bacon and Canadian lamb within the Dominion. Pointing out that the consumer must be assured of quality and grade in product, a number of special exhibits were prepared during the year featuring wool grading and wool improvement, the ideal market lamb and the problems connected with lamb marketing, hog grading and the problems connected with the production of the select bacon hog, such as feeding and management, prolificacy, bacon type, etc. Ideal lamb carcasses and quality in bacon cuts, as applied to the Canadian trade, were also illustrated with a view to directing the consumer so that the demand for better quality meats would be increased.

GOAT PROPAGANDA WORK

The goat industry continues to expand, due to the ability of the goat to adapt itself to the varied conditions which obtain throughout the Dominion, and at the same time provide a source of milk supply for families under conditions where the dairy cow is an impossibility. The demand for breeding stock continued active throughout the year and many inquiries were directed to breeders of goats who were likely to have stock for sale.

Arrangements have been made with the Goat Breeders' Association for the initiation of the Record of Performance Test for milk goats and it is expected that applications will be received from a number of breeders shortly. It is very probable that within the next year a number of goats will be qualifying under the Record of Performance system.

Exhibits of goats at the three British Columbia fairs and at some of the larger fairs in the other provinces, particularly at the Canadian National Exhibition, Toronto, were very creditable, in fact exceeded all previous records, indicating that the goat breeders are alive to their opportunities and that the industry is due for further progress.

Markets Intelligence and Stockyards Services

The Markets Intelligence and Stock Yards Services of the department are administered through the Live Stock Branch. These services represent the means by which the department promotes the marketing of commercial live stock in Canada. Annually about 1,250,000 cattle, 300,000 calves, 4,000,000 hogs and 500,000 sheep and lambs are liquidated through facilities and services under the supervision of the Dominion Live Stock Branch. The value of such marketed stock varies between $125,000,000 and $130,000,000 per annum.

The present condition of the live stock industry is most encouraging and the market strongly on the upgrade, especially for all classes of farmers' cattle. The assistance provided by the department has done much toward stimulating confidence in production.

The marketing services supplied through the branch are designed to stimulate production and trade through the following media:—

Through the Live Stock Commissioner, regulations are being enforced, governing the construction, maintenance and operation of public stock yards throughout the Dominion, and the methods employed in the actual sale and purchase of all live stock marketed at such yards. As well, the Markets Intelligence Service makes available to producers and trade, detailed information as to supply and demand of commercial live stock marketed at, or passing through, any or all of these yards. Further, this service includes a bureau of broad and detailed intelligence in regard to general live stock and meat trade, both domestic and foreign, and issues daily, weekly, monthly and annual reviews and comments on supply and demand on domestic and foreign markets.

The stock yards duties are discharged by qualified officers of the branch stationed at each of the public stock yards. These yards, nine in number, are located at the following places: Calgary, Alta.; Edmonton, Alta.; Saskatoon, Sask.; Prince Albert, Sask.; Moose Jaw, Sask.; Winnipeg, Man.; Toronto, Ont.; East End, Montreal, P.Q.; and West End, Montreal, P.Q.

The market data and allied information are obtained through co-operation as between the stock yard agents and their assistants and the Markets Intelligence editorial and statistical staff at headquarters.

During the past year total live stock values have been advancing and have exceeded those of the previous year by a considerable amount. Average returns on the rank and file of the cattle offerings have been eminently satisfactory during the greater part of the market period. The market conditions influencing

the sale of this stock were analyzed for the benefit of producer, trader and consumer, and also permanent statistical records made of each purchase and sale, for future reference.

The chief activities of the services are hereunder enumerated.

Enforcement of regulations, as provided under the Live Stock and Live Stock Products Act, resulting in—

(*a*) The bonding of commission men, operating on public stock yards;
(*b*) The operation of live stock exchanges under Government supervision;
(*c*) The regulation of service charges;
(*d*) Improvement in and supervision of the accommodation provided for live stock; and
(*e*) The regulating of the quality and cost of feed supplied.

Officers of the branch located at the Central Stock Yards at Montreal, Toronto, Winnipeg, Calgary, Edmonton, Prince Albert, Moose Jaw and Saskatoon, graded for publicity purposes all live stock offered for sale, obtained detail as to the selling price, origin and disposition of the stock, and, as well, the general condition of supply and demand.

The stock yards officers supplied the press with daily market news, letters and representative live stock sales. These, together with the weekly, monthly and annual analyses of supply and demand, have practically eliminated all other markets information services. Accurate analysis and quick service has in this way taken place of the often contradictory and ambiguous statements of market conditions formerly in circulation.

The Inter-Stock Yards Telegraph Service inaugurated during 1919 was continued throughout the year. Telegrams are prepared by each stock yard agent after a careful analysis of the condition of trading and are wired each day as soon as the market is established, to the other stock yard agents. Previously, only those who could afford a telegraph service were able to benefit through immediate knowledge of the day's trading conditions at other than their own market.

The Daily Press Telegraph Service, inaugurated in 1919, is being continued. This consists of analysis of the conditions of supply and demand, telegraphed each day over the Canadian Press Limited, for publication in the daily news press of Canada. These wires are prepared by the officers at each of the yards at 11 a.m. and 4 p.m. daily, and appear the same evening and the following morning in practically every evening and morning paper in Canada.

The Weekly Markets News Service is being provided to the agricultural press of Canada, to district representatives of agriculture, to a selected producers' mailing list, to the various provincial Departments of Agriculture, and to the British and American trade. This service consists of an analysis of live stock supply and demand, comments on prospects for future markets, statistical tables showing the grading, numbers, average price, price range for bulk of sales and top prices of all live stock offered for sale, the disposition and comparative receipts of the same, the grading of hogs under the Hog Grading Policy and the exports of live stock to foreign countries.

To meet a growing demand for the same, the Markets Service undertook in March, 1925, the translation into French of the commentary section of the weekly Live Stock Market Report. The French edition is being mailed to the French press, agronomes in Quebec and to a list of live stock producers who have requested the report.

A special report on the opening market of each week is prepared by the stock yards representatives and sent to the farm press in time for publication in the current issue.

Each month publicity is given to the live stock industry by the distribution of information on domestic and foreign crops, weather conditions, live stock and allied industries.

Memoranda on production, distribution and consumption of live stock and live stock products, both domestic and foreign, are prepared for the information of officers of the department and outside parties.

This service continues to build up an information bureau on the statistical position of the live stock industry, general conditions under which live stock production is undertaken, the foreign live stock situation, world's animal foodstuffs situation, the condition of the import and export trade in live stock and live stock products and the financial conditions influencing the industry.

The service is recording the point of origin, class, grade and sex of all stock offered for sale at stock yards. These records cover the sales during the past six years and are compiled in such a way as to be of value in estimating the condition and extent of the marketable surplus, either locally, provincially or for Canada as a whole. A monthly statement is sent to each of the agricultural representatives in the various provinces of Canada, showing the shipments from his particular county, in detail, to public stock yards, abattoirs and on export.

The inspected packing plants throughout the Dominion continue to supply weekly statements as to their country purchases. As a large percentage of the total annual slaughterings by inspected establishments are not sold on the public market, the information obtained is indispensable to a complete survey of the supply and demand situation.

Through arrangements as between the Department of Agriculture and the Department of Customs, the branch records and issues information covering the origin and destination of all classes of live stock exported from the Dominion. This information completes the record of the total movement of Canadian live stock during any period of the year and allows for the working out of formulae on which to estimate probable production and distribution.

A weekly cable service of the British market for Canadian cattle and bacon is telegraphed by the division to the Canadian newspapers. The information is being supplied by the most reliable operators on the markets at Glasgow, Liverpool and London. These cables are elaborated in the Branch and given the widest publicity possible through the medium of the Associated Press of Canada and our periodical publications.

A daily wire service is operated between the stock yards officers and the United States markets, with a view to obtaining exact and immediate knowledge of the prospects for export. Considerable financial benefit to the live stock industry is resulting from this service, shippers now being better able than heretofore, to estimate the margin between domestic and foreign market prices before making shipment.

The Eighth Annual Review of the Live Stock and Meat Trade Situation has been published and distributed.

The Eighth Annual Report of the Origin and Grades of Commercial Live Stock has been published and distributed.

The policy whereby immature calves offered for sale on public stock yards, are subject to condemnation, was again administered by the Live Stock Commissioner through the stock yards representatives. This policy has been effective for a number of years and has resulted in marked improvement in the quality of veal offered for public consumption.

The markets staff is taking care of the compilation of the statistical information in connection with official hog grading under the federal Hog Grading Policy. The stock yards agents co-operate with the hog graders in promoting satisfactory development of grading of hogs at the yards.

The stock yards agents have extended their activities toward promoting familiarity with required market types of live stock. On request, the agents have addressed meetings, paid visits to farms for the purpose of grading the stock into the various classes and, as well, have encouraged the clearance of unsuitable feeding stock and the purchase of that of good feeding type and quality.

A radio markets and agricultural news service, developed during the spring of 1924, has been appreciably extended. Under arrangements with the Canadian National Railways Radio Department, the Markets Service broadcasts the latest reports on the live stock markets in Canada twice each week, supplementing the live stock, poultry, farm produce, crop and weather reports with talks on farm practices and general agricultural developments. At present, this service is being broadcast weekly from the following cities: Moncton, Toronto, Montreal, Winnipeg, Calgary, Edmonton, and twice weekly from Ottawa. In addition, daily noon reports are broadcast from Moncton, Montreal, Toronto and Winnipeg, giving a summary of quotations on the same morning's markets. During the present fiscal year, daily afternoon broadcastings are being made from Ottawa. Live stock markets, dairy produce, eggs and weather report data make up the programs and they are specially designed to be useful to the producers in Eastern Canada.

During 1928-29, this division will confine its efforts to enlarging further the projects already in operation.

THE SEED BRANCH

The Seed Branch encourages the production of superior seed; maintains laboratories for testing seeds, feeding stuffs and fertilizers; supplies markets information; provides an inspection service to grade seed, hay and straw; and administers the Seeds Act, Feeding Stuffs Act, Fertilizers Act, Inspection and Sale Act, and Agricultural Pests' Control Act. The branch organization includes four main divisions, and for the enforcement of the Acts, Canada is divided into six inspection districts.

The Laboratory Division

With the increased scope of the control work carried on by the Seed Branch, the laboratory division is extending its activities from year to year. Originally equipped for seed testing only, it now offers facilities for microscopical and chemical analyses of feeding stuffs and fertilizers, and the testing of binder twine and other commodities controlled by the Inspection and Sale Act.

The work of the whole division was formerly carried on in the central laboratory at Ottawa; but the large number of samples and the need for prompt service made necessary the establishment of other seed laboratories. During the past year 54,146 samples were received in the five laboratories situated at Ottawa, Quebec, Toronto, Winnipeg and Calgary. A new laboratory is being equipped at Sackville, N.B., to serve the Maritime Provinces. Samples originating in this district have been analyzed at Ottawa. Feed and fertilizer samples are submitted to micro and chemical analysis at Ottawa.

The following table shows the number of samples received in each laboratory during the past year, and their sources:—

—	Trade	Customs	Official	Total
Quebec	3,145	1,361	271	4,777
Ottawa	6,740	1,660	2,374	10,774
Toronto	7,527	4,089	1,323	12,939
Winnipeg	12,200	1,652	627	14,479
Calgary	9,533	1,375	269	11,177
Totals	39,145	10,137	4,864	54,146

Trade refers to samples sent in by merchants, farmers and institutions.
Customs refers to samples taken by Customs or Seed Branch officials in accordance with the provisions of the Seed Importation Regulations.
Official samples are those taken by inspectors from lots which are sold or offered for sale and suspected of violating the Seeds Act.

The samples are analyzed for purity and tested for germination, the two main factors on which the grades provided under the Seeds Act are based. In the following table the number of purity and germination tests are shown for each laboratory:—

—	Purity	Germination	Total
Quebec	4,526	3,365	7,891
Ottawa	5,810	6,963	12,773
Toronto	10,870	9,238	20,108
Winnipeg	8,390	11,774	20,164
Calgary	3,869	11,561	15,430
Totals	33,465	42,901	76,366

One of the greatest difficulties in this division is the very uneven distribution of the work over the year. Naturally most of the samples are received between the harvest and seeding time, but January, February and March are always much busier months than November and December. The following table shows the percentage distribution by months of all the tests made in the laboratories:—

	Purity	Germination
January	14·0	15·3
February	17·0	19·7
March	20·6	20·1
April	11·7	9·6
May	7·2	5·6
June	4·4	3·5
July	1·5	1·1
August	2·8	1·4
September	2·5	2·2
October	3·7	3·5
November	5·9	7·8
December	8·7	10·2

The nucleus of a permanent staff is maintained, and as far as time permits investigations are carried on during the summer months. Each laboratory has definite projects which aim at improving the methods of seed testing or are of direct importance to agriculture in the particular district. Four major papers were published on this work during the year, and other projects were brought nearer to conclusion. The inspection division relied on the laboratory staff for help in many of their investigations, notably a number of seed drill

surveys which were made to ascertain the quality of seed used by the farmers. The results of these surveys serve as excellent material for better seed campaigns which are carried on in co-operation with the provinces.

EDUCATIONAL AND OTHER ACTIVITIES

The distribution of the several sets of weed seed collections has been continued. Reprints of papers on investigations were widely circulated. The educational exhibits which were prepared for a number of winter fairs attracted favourable comment from farmers and other interested parties.

The seed trade has an eminently international aspect by reason of the localized nature of seed production, particularly for many kinds of forage crop and vegetable seed which are distributed from certain centres all over the world. In order to allow an unhampered distribution of suitable seed, and to check undesirable practices in international trade, it is highly necessary that methods of seed testing be uniform all over the world, and that seed testing stations keep at all times in close contact with each other. For this reason considerable time was spent by officers of the laboratory division on several projects advanced by the International Seed Testing Association, notably the drafting of international rules for seed testing.

Four series of referee samples were analyzed in each of our laboratories in co-operation with some seventy seed-testing stations all over the world, in order to further the uniform application of the rules and facilitate the international trade in seeds.

MICRO-ANALYSIS OF FEEDING STUFFS AND FERTILIZERS

During the past year 1,285 samples were analyzed microscopically. Most of the samples were sent to the laboratory by the inspectors. They may be classified as follows:—

Mixed feeds	472
Manufacturers' by-products	248
Mill feeds	397
Screenings, etc	91
Chops	70
Fertilizers	25
Tonics	2

The mixed feeds were found to require continual checking, as many of them differed from the registration claim in at least one ingredient. For the most part, however, the materials used as constituents were found to be of excellent quality.

As a result of feeding experiments, manufacturers are adding to their formulæ materials such as cod liver meal, yeast, iodized salt, and mineral substances.

The greater number of by-products examined were for abattoirs or fisheries. Most of them were quite good, but the adulteration of meat meals of high protein content, by the addition of hoof meal or blood meal, was detected in some cases. The majority of other by-products were as claimed. Variations in manufacturing processes and broad definitions tend to make some of them, notably the oat by-products, show a wide variation in composition and feeding value.

Most of the mill feeds, chops and screenings were of good quality. A few very dirty mill feeds were sent to the laboratory by dealers. One bran examined had almost fifty per cent of foreign material. This was a most unusual sample. During the past few years these products have been clean and fairly uniform.

The examination of fertilizers was a new development. These had all aroused the suspicions of inspectors or of consumers, and most of them were found to differ from the manufacturers' claims, many containing worthless materials as adulterants.

In addition to the general routine, investigations have proceeded for the discovery of new methods to facilitate the work of analysis.

CHEMICAL ANALYSIS OF FEEDING STUFFS AND FERTILIZERS

There was a hundred per cent increase in the number of analyses made at the Ottawa laboratory. Most of the samples were taken by the inspectors throughout the Dominion, but a number were received from farmers and manufacturers, who are charged a fee of five to fifteen dollars, according to the number of analyses required.

The samples received may be classified as follows:—

Feeding Stuffs—	
Mixed feeds	619
Bran	165
Shorts	161
Middlings	94
Feed flour	48
Screenings, scalpings and scourings	95
Tankage, meat and fish meals	119
Oat hulls and by-products	57
Other cereal by-products	93
Oilcake meals	55
Miscellaneous	77
Total	1,583
Fertilizers—	
Mixed	86
Pure salts	105
Tankage, bone meal, etc	72
Basic slag	27
Acid phosphate	21
Miscellaneous	15
Total	326

The quality of feeding stuffs and fertilizers is dealt with in the contributions from the respective divisions. The chemist gave evidence in two court cases arising out of the analyses. Moisture determinations were made on flour shipments to the Orient.

THE AGRICULTURAL PESTS CONTROL ACT

Another forward movement in controlling the sale of agricultural materials was made at the 1927 session of Parliament, when an Act was passed to regulate the sale and inspection of agricultural economic poisons. Hitherto there had been no control over these materials and numerous complaints were being received, not only from gardeners and fruit growers but from reputable manufacturers who desired protection from certain spurious articles which were appearing from time to time on the market.

Agricultural and horticultural organizations, officials of the Department of Agriculture, and representatives of the trade were consulted before the framing of the bill, which came into force on October 1, 1927. Canadian manufacturers and dealers were given until July 1, 1928, to dispose of their stocks of materials and labels on hand, but all foreign manufacturers were required to comply with the law without any time allowance.

A "poison" is defined as "any substance or admixture of substances represented as a means for preventing, destroying, repelling or mitigating any and all fungi, weeds, insects, rodents or other plant or animal pest collectively or individually affecting agriculture." This includes insecticides, fungicides, germicides, weed killers, rat and gopher poisons, and sheep dips.

No person may manufacture, import, advertise or in any manner offer for sale any brand of poison unless it has been registered with the Department and assigned a registration number. Application for registration may be made by

either the manufacturer, importer, or vendor, on forms which are supplied for that purpose. Each application must be accompanied by the registration fee, which is twenty dollars. If the applicant be non-resident in Canada, he must appoint a Canadian representative who will be held responsible for due compliance with the provisions of the Act and regulations made thereunder.

The minister is given power to refuse registration of any poison if in his opinion the brand name is deceptive or misleading with respect to the guaranteed analysis, ingredients, or method of preparation; or if the analysis or ingredients are approximately the same as another brand registered by the same manufacturer; or if it is unsuited for the purpose for which it is sold or represented; or if it is harmful to vegetation (except weeds), domestic animals, or public health, when used according to directions.

When a brand of poison has been assigned a registration number it may be manufactured, imported, sold, or advertised for sale in Canada during the period continuing from the date of its registration until the first day of January following. Registration of a poison may be renewed from year to year without any change in the registration number upon payment of the renewal fee of twenty dollars, providing no change is made in the guaranteed analysis or in the ingredients. Registration may be cancelled if any of the provisions of the Act or regulations are violated, or if subsequent to registration the poison has been found to be of doubtful value. Importation of any poison may be prohibited if in any way its sale would constitute an infraction of the Act or regulations.

When poisons are in packages a tag or label must be durably attached thereto giving the name and address of the manufacturer, the brand name, the registration number, the word "poison" with the skull and cross bones, the guaranteed analysis, and the net quantity by weight or volume in avoirdupois or imperial measure. If the material is sold in bulk the information must be furnished to the purchaser in writing by the vendor.

The minister has power to appoint an advisory board which may at his request prepare such regulations as may be deemed necessary under the Act.

The Board recommended a number of regulations which were established by the minister. The more important of these are outlined as follows:—

In arsenical poisons the water soluble arsenic shall not exceed 1·25 per cent in Paris green and arsenate of lime, 0·50 per cent in arsenate of lead, 0·25 per cent in all other preparations or combinations of arsenical materials when used as an insecticide on foliage.

A list of poisons and their antidotes is given. The printing of the antidote must be in both the English and French languages. The information required to be stated on the tags or labels must be printed in not less than 7-point type, or if stencilled on barrels, bags, etc., the letters must be one inch high.

The manner in which the guaranteed analysis shall be stated is given in detail. All metallic poisons must be stated in their atomic form, and in the case of arsenical preparations the water soluble arsenic must also be stated.

Over 160 registrations have been issued and applications are still being received at the end of May, 1928.

The Seed Division

The work of the Seed Division consists in part in the study of foreign and domestic seed legislation, also of the import and export regulations in effect in all countries exporting or importing seeds. This study is made with a view to drafting new or redrafting existing control measures to be submitted for the Minister's consideration. The division deals primarily with the operation of the Seeds Act and regulations thereunder. Attention is given to seed production, to seed supply, as between districts and provinces, and to international trade in seeds of all kinds.

THE SEEDS ACT

The Advisory Board operates under the chairmanship of the Seed Commissioner and includes an equal representation of seed growers and seed merchants and one representative from the Agricultural Committee of the House of Commons.

Recommendations were made by the board, and approved by the minister, embodying such changes in the minima of quantity with respect to both purity and germination as were believed should be applied to certain kinds of seed for the ensuing year in order that adequate stocks might be secured for the Canadian trade. The principal changes refer to standards of purity for domestic red clover, alfalfa and sweet clover under table 2 of the regulations. An increase in the number of noxious weed seeds was allowed in grade No. 2 to permit of cleaning to this grade a larger percentage of the Canadian seed crop. Under table 1 changes were made with respect to the grade standards for cereals, particularly oats. In defining the tolerance that may be allowed for grade Extra No. 1 in respect to freedom from noxious weed seeds, "free", as applied to the grading of oats, is interpreted to mean a tolerance of one wild oat per bushel. Under the standards for grade No. 2 a minimum of ten seeds of wild oats and one other secondary noxious weed seed is permitted in oats, barley and rye. The minimum percentage germination for seeds of vegetables was altered as found necessary for certain kinds with a view to facilitating the entry into Canada of imported lots of seed.

The classification of weed seeds was amended for 1927 by transferring bladder campion and white cockle from the primary noxious to the secondary noxious class, in order to make possible the grading and retaining of Canadian-grown supplies of red clover seed for the home market.

Owing to the shortage of the Canadian alfalfa seed crop in 1927 the seed importation regulations in respect to the colouring of alfalfa seed were revised to provide for the colouring of all imported alfalfa seed 10 per cent red, excepting seed originating in the States along the Canadian border and in Utah, Wyoming, and South Dakota. Seed from these States, when certified and sealed by State officials, may be permitted entry into Canada if 1 per cent of the seed in each container is coloured orange. This exception was allowed in order to differentiate between seed originating in districts with climatic conditions similar to Canada and that from districts where seed is grown under less hardy conditions.

Control measures included under the Seeds Act prohibit the use of false or spurious names and misrepresentations as to variety or description of seeds or plants in any form of advertising or otherwise. Variety names for particular kinds and varieties generally employed in Canada during the year ending March 31, 1923, are allowed, and provision is made for the licensing of new variety names on the basis of a report made by any plant specialist designated by the minister for the purpose of making the required test or examination. A number of tests have already been made, and since the inception of this work the following new variety names for the kinds specified have been licensed for general use in Canada:—

Kind of Seed	Variety Name
Bean	Dwarf No. 301
	Excelsior Climbing French
	Golden King
	Nancy D.
	O.A.C. No. 211 Soy Beans
Cabbage	Golden Acre
	Penn. State Ball Head
Chicory	Small Rooted (Radichetto)
Corn	Banting
	Sunshine

Kind of Seed	Variety Name
Cucumber	Colossal
	Green Pack
	The Vaughan
	Windermoor Wonder
Muskmelon	Lake Champlain
Mustard	Florida Broad Leaf
Pea	Dashaway
	O.A.C. No. 181 Field Pea
Pepper	Early Giant (Harris)
	World Beater
Potato	British Queen
Radish	Twenty Day Forcing
Rhubarb	Ruby
Spinach	Princess Juliana
Swede turnip	Yellow Garden
	White Garden
Tomato	Canadian
	Marglobe
	Red River
Flax	Winona
Oats	Gopher
	O. A. C. No. 144 Oats
	White Cross No. 19
Rye grass	Fyra
Timothy	Swallow
Wheat	Axminster
	Brownhead (Broatch's)
	Early (Broatch's)
	Golden Ball
	Michikoff
	O.A.C. No. 85 Spring Wheat
	Red Bobs No. 222
	Renfrew
	Vermilion
	Whitehead (Broatch's)

Work in connection with the establishing of a standard list of variety names has culminated in the publishing of an "Official List of Established Variety Names, 1926". The list includes 226 distinct varieties of merits which were selected from 2,425 variety names advertised or used in Canadian seed catalogues in 1923. Revisions and additions will be made when necessary to include recognized new varieties.

Progress is being made in establishing standard varietal descriptions and type photographs of field root and garden vegetables. Investigations to date would indicate that as a result of the variations shown in field tests of the so-called same variety of some kinds, it will be impossible to arrive at anything definite with respect to these varieties until Elite stock seed has been produced. This applies particularly to vegetables. When stock seeds are multiplied, Canadian-grown vegetable seeds should be even more popular than at present. Their adaptability to Canadian conditions, combined with genuineness of stock and trueness to variety names, should increase their demand and cause this seed to command a premium in the market. A survey of vegetable seed production in the Pacific coast states was made by the Chief of the Seed Division during the summer of 1927. Information was gathered on the growing and cleaning of these seed crops, which will be of assistance to vegetable seed growers and will serve as a guide in preparing seed importation regulations under the Seeds Act for consideration of the Advisory Seed Board.

AMENDMENTS TO THE SEEDS ACT

Suggested amendments to the Seeds Act were prepared following the recommendations received from seed growers' organizations, the Canadian Seed Trade Association, and the Advisory Seed Board in conference with Seed Branch officials. These amendments were embodied in An Act to Amend the Seeds Act, which with a few minor changes was passed by Parliament on June 11, 1928.

The principal amendments included a change in the names of certain grades of seed; provision for the withholding of a license to sell new varieties of cereal grains if such are found to possess such inferior qualities or characteristics as to impair their value for commerce; the giving of power to the minister to change a variety name when it is found in the public interest to do so; a change in the provisions governing the importation of seeds so that they may apply to seeds, named in section 5 of the Act, imported for the purpose of selling or offering for sale or for the purpose of seeding, or any kind of garden or vegetable seeds that may be prescribed by regulation unless they are branded, marked or coloured in accordance with the provisions of the Act and conform to the regulations thereunder. A few minor amendments which experience has shown to be necessary were made in order to overcome difficulties in the administration of the Act.

SEED GRADING

The principle upon which the Seeds Act is based is that of established grade names with provision for grade definitions to be prescribed by regulations made by the Minister of Agriculture. The grading of practically all seeds sold for seeding purposes constitutes an important part of the seed control work and requires the services of a large staff of inspectors during the season when seed stocks are being assembled and cleaned at central plants and on growers' premises. A seed grader also operates at each district office where large numbers of control and customs samples are received. The wide domestic and export trade in graded seeds makes it imperative that all grading be done uniformly, and in order that standards of quality for each season may be arrived at with a full knowledge of available seed supplies and requirements, one officer exercises general supervision over seed grading in the several inspection districts.

Provision is made for the compulsory grading of nearly all kinds of seed, and while field root and garden seeds may be sold under a guarantee of minimum quality, yet the grading of these seeds is steadily growing in favour. In applying the grade definitions which have to do with the minima of general quality for the several grades as influenced by seasonal conditions, it is important that the standards be fixed at levels which will ensure an adequate supply of seed, particularly of the higher grades. With the broad expanse of our agricultural areas, and untoward climatic conditions which prevailed over sections of Eastern and Western Canada during the growing and harvesting seasons of 1927, a very difficult situation was encountered in arriving at satisfactory quality standards for cereals, alsike clover, and alfalfa. For some of the cereals it was considered expedient to adopt the standards of the previous season. For alsike clover and alfalfa they were materially lowered. Red clover and sweet clover seed, however, were found to be of superior quality to that produced the previous season, and these standards were raised considerably.

The grading of seed for commerce on the basis of control samples received at district offices continues to increase in volume. Control sample certificates are issued in the names of the senders of the samples, and these are authority for offering under a grade name and a control sample certificate number the seed lots represented. A control sample certificate is defined as "A certificate that is issued on a control sample of seed received for analysis and grading at the office of a district inspector." This means that the full responsibility of sampling the seed lot purported to be represented by the control sample rests with the sender, and that in making sales he must maintain the quality up to the standard of the control sample. As indicative of the volume of work and responsible duties involved in grading agricultural seeds and in checking seed importations, it may be stated that 52,308 samples were recorded, tested and graded at inspection points during the year. The total amount of seed represented by these samples would be several millions of bushels.

The quality of seeds of the kinds listed in the following table and represented by control samples is indicated by the percentages coming within the several grades. A separate division is made of the factors "purity" and "germination," and the sources of origin are indicated by the percentages stated under the headings "Farmers," "Merchants" and "Institutions."

—	Source			Purity				Germination			
	Farmers	Merchants	Institutions	No. 1	No. 2	No. 3	Rejected	No. 1	No. 2	No. 3	Rejected
	%	%	%	%	%	%	%	%	%	%	%
Alfalfa	28·7	61·9	9·4	52·4	29·9	11·5	6·2	97·6	0·7	1·2	0·5
Alsike	12·7	84·6	2·7	23·1	33·7	24·7	18·5	90·9	2·5	4·1	2·5
Red clover	58·8	37·0	4·2	19·0	32·7	28·4	19·7	85·0	7·6	5·4	2·1
Sweet clover	40·1	53·8	6·1	26·1	35·1	26·9	11·9	81·6	8·3	7·7	2·4
White clover	6·9	86·9	6·2	43·6	20·7	25·2	10·5	73·4	4·4	1·6	0·7
Timothy	46·5	46·6	6·9	27·3	41·6	16·4	14·7	90·6	3·9	3·8	1·7
Orchard grass	.....	80·0	20·0	25·7	14·3	31·9	28·6	45·4	21·2	12·1	21·2
Brome grass	26·9	67·4	5·4	46·1	25·2	20·7	7·8	69·2	15·5	12·3	3·2
Perennial rye grass	.....	100·0	.....	33·3	44·4	18·5	3·8	81·4	7·4	7·4	3·8
Western rye grass	48·8	37·0	14·2	56·4	25·2	9·2	9·2	86·5	5·8	5·8	.....
Italian rye grass	.....	87·5	12·5	57·1	14·3	14·3	14·3	75·0	.....	12·5	12·5
Meadow fescue	17·8	50·0	32·2	55·5	11·2	11·1	22·2	87·5	4·2	8·3	1·9
Millet	14·9	84·3	0·8	33·0	22·4	22·1	22·5	70·0	9·9	10·0	10·1
Blue grass	0·8	95·0	4·2	42·3	36·1	14·5	7·1	77·0	13·0	3·0	7·0
Red top	1·4	92·1	6·5	47·2	20·0	13·7	19·1	94·6	3·5	1·9	.....
Bent grasses	94·7	3·0	2·3	45·2	23·9	14·1	16·8	82·6	12·7	1·8	2·9
Crested dog's tail	.....	100·0	.....	75·0	25·0	.....	.....	60·0	20·0	20·0	.....
Other fescues	2·0	96·0	2·0	75·5	13·3	2·4	8·8	76·9	8·7	3·6	10·8
Other grasses	.....	61·5	38·5	80·0	20·0	.....	.....	60·6	21·2	3·1	15·1
Wheat	65·0	25·8	9·2	34·0	10·0	25·0	31·0	64·2	13·0	9·7	13·1
Oats	65·8	22·0	12·2	25·3	15·2	16·3	43·2	73·7	5·7	8·2	12·4
Barley	66·0	12·4	21·6	45·8	11·8	12·1	30·3	79·4	6·6	6·2	7·8
Rye	44·4	43·3	12·3	35·0	15·0	20·0	30·0	80·2	2·6	8·6	8·6
Vetches	9·0	86·3	4·7	50·0	15·8	26·3	7·9	76·6	8·7	6·0	8·7
Buckwheat	32·5	65·1	2·4	31·7	10·9	17·0	40·4	82·6	1·3	3·0	13·1
Sunflower	13·0	77·0	10·0	57·7	23·0	15·3	4·0	62·8	14·3	14·3	8·5
Peas (field)	61·9	33·3	5·1	56·8	27·8	12·6	2·8	94·0	2·5	3·5	.....
Corn (field)	10·5	80·0	9·5	68·6	10·9	10·4	10·1	68·0	10·0	12·4	9·6
Flax	65·0	24·5	10·5	30·0	18·4	36·8	14·8	62·3	11·6	8·5	17·6

—	Source			Germination			
	Farmers	Merchants	Institutions	No. 1	No. 2	No. 3	Below minimum
	%	%	%	%	%	%	%
Peas (garden)	6·4	92·8	0·8	75·4	6·1	8·3	10·2
Beans (garden)	6·5	91·6	1·9	68·6	2·7	4·4	24·3
Corn (garden)	11·8	84·4	3·8	82·7	3·9	4·8	8·6
Mangel	6·0	87·2	6·8	75·4	8·6	4·9	8·6
Beet	4·0	90·8	5·2	60·3	10·6	12·2	16·9
Turnip	10·4	86·0	3·6	54·0	14·1	16·0	5·9
Swede	.....	95·5	4·5	43·2	16·4	13·4	27·0
Radish	.....	100·0	.....	67·0	8·8	10·9	13·3
Cabbage	.....	98·0	2·0	48·5	17·4	9·8	24·3
Cauliflower	.....	100·0	.....	63·0	18·5	14·8	3·7
Lettuce	.....	100·0	.....	62·6	25·1	3·9	8·4
Onion	10·7	86·2	3·1	68·8	6·8	6·8	17·6
Tomato	2·0	96·0	2·0	67·6	10·3	13·2	8·9
Cucumber	.....	98·0	2·0	86·3	3·0	6·0	4·7
Melon	2·0	98·0	.....	58·5	17·0	7·5	17·0
Squash	.....	100·0	.....	71·4	2·5	7·1	19·0
Pumpkin	.....	100·0	.....	70·9	6·5	6·5	16·1
Spinach	.....	98·0	2·0	67·1	21·4	2·5	9·0
Carrot	26·0	67·8	6·2	37·8	19·3	22·7	20·2
Celery	.....	91·5	8·5	42·5	19·1	15·0	23·4
Parsley	13·1	82·6	4·3	22·7	22·7	27·3	27·3
Parsnip	7·0	88·3	4·7	32·5	25·6	9·4	32·5

Vegetable seeds whose germination falls below a certain minimum must be labelled to show the actual germination.

The service of inspection, grading and sealing of seed lots in containers is also making an increased demand on the time of our inspection staff. For seed

so graded and sealed a Seed Inspection Certificate is issued. This certificate is defined as "A Certificate given by an inspector on seeds sampled, examined and graded by him, or under his direction." Every seed lot accepted to grade Registered or Extra No. 1 was derived from a seed crop for which a Crop Registration Certificate was issued by the Canadian Seed Growers' Association. Canadian-grown seed inspected, graded, and sealed in the sacks commands recognition in domestic and foreign markets. There were inspected and graded at central cleaning plants and on growers' premises the following kinds and quantities of seed:—

Kinds of Seed		Registered	Extra No. 1	No. 1	No. 2	No. 3
Wheat	bushels	36,875	40,766	24,977	3,365	3,029
Oats	"	35,015	21,410	68,406	39,269	23,202
Barley	"	10,385	5,421	3,204	16	.....
Rye	"	18	30	.....	.....	.....
Peas	"	145	.....	.....	.....	.....
Soy beans	"	28	.....	.....	.....	.....
Flax	"	437	420	2,798	14	23
Corn	"	37	43	.....	.....	.....
Red clover	pounds	.....	.....	33,626	20,680	5,694
Alfalfa	"	7,411	3,337	57,060	.....	.....
Sweet clover	"	1,706	.....	8,675	185	3,457
Brome grass	"	.....	.....	139,402	.....	.....
Browntop	"	.....	.....	12,198	8,597	7,355
Creeping red fescue	"	.....	.....	560	.....	.....
Swede turnip	"	800	.....	.....	.....	.....

Regulations which govern the importation of seeds have a very important bearing on Canadian seed supply. They are applied in co-operation with Customs officials so that no serious inconvenience is caused importers. They embody control measures equivalent to those of other countries, and their operation precludes the admission of seed of a quality which could not be legally sold in the country of origin. During the year 15,757,158 pounds of seed were entered at ports of entry under these regulations. The following table includes the principal kinds and quantities of each, with countries of origin:—

Kinds of Seed	United States	British Isles	New Zealand	Holland	Germany	France	Denmark
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Alfalfa	62,970	.....	.....	.....	.....	.....	.....
Beans (field)	32,583	484	.....	690	.....	12	.....
Beans (garden)	214,483	15,095	.....	2,625	1,000	210	.....
Beet (garden)	81,999	31,668	.....	9,350	.....	11,114	.....
Beet (sugar)	161,116	1,278	.....	400	.....	.....	.....
Bluegrass	116,540	1,680	.....	.....	.....	.....	.....
Cabbage	11,538	17,574	.....	2,247	.....	1,582	3,302
Carrot	26,354	5,383	.....	3,013	.....	1,056	.....
Cauliflower	383	182	.....	296	.....	22	605
Celery	814	1,030	.....	41	.....	71	.....
Cereals	43,576	10,000	.....	.....	.....	.....	.....
Corn (field)	908,422	.....	.....	.....	.....	.....	.....
Corn (garden)	1,523,980	6	.....	855	.....	10	.....
Cucurbits	37,471	8,295	.....	2,144	.....	1,469	.....
Perennial rye grass	2,006	13,310	39,460	.....	.....	.....	1,000
Fescues	13,746	3,554	92,080	2,600	2,985	.....	.....
Flax	896	.....	.....	.....	.....	.....	.....
Hemp	8,116	.....	.....	.....	.....	.....	.....
Herbs	356	384	.....	117	.....	377	.....
Lettuce	9,147	5,569	.....	200	.....	1,267	.....
Mangel	4,395	233,808	.....	6,185	.....	10,044	150
Millet	446,304	.....	.....	.....	.....	.....	.....
Onion	58,774	1,655	500	171	.....	157	100
Orchard grass	9,639	11,200	.....	.....	.....	.....	.....

Kinds of Seed	United States	British Isles	New Zealand	Holland	Germany	France	Denmark
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Other grasses	25,965	6,076	10,719	3,400	1,000	.....	150
Other kinds	13,201	.....	.....	38	.....	.....	.....
Parsnip	10,921	390	.....	290	.....	52	.....
Peas (garden)	578,352	147,859	.....	1,416	.....	34	.....
Radish	14,150	17,027	.....	11,718	.....	1,822	.....
Rape	18,440	2,612	.....	119,514	3,000	.....	.....
Red clover	725,523	265,418	123,200	6,700	66,000	33,000	167,386
Red top	275,424	112	.....	.....	.....	.....	.....
Sorghums	74,123	.....	.....	.....	.....	.....	.....
Spinach	7,223	4,712	.....	10,379	.....	384	1,650
Sunflower	89,993	.....	.....	.....	.....	.....	.....
Sweet clover	40,319	.....	.....	.....	.....	.....	.....
Timothy	7,272,612	.....	.....	.....	.....	.....	.....
Turnip (field)	4,058	98,727	.....	175,910	.....	.....	.....
Turnip (garden)	14,395	180,227	.....	161,001	.....	14	.....
Vegetables	25,092	13,211	.....	6,008	.....	1,642	369
Vetches	24,342	36,074	.....	.....	.....	.....	.....
White clover	57,476	15,394	.....	.....	.....	.....	.....

China supplied 1,179 lbs. vegetable seed, Japan 1,193 lbs., Hungary, 7,550 lbs., Italy 85 lbs., and Switzerland 677 lbs. Poland supplied 176,730 lbs. of red clover seed, and Prussia 206,330 lbs.

SEED PRODUCTION

It is generally conceded that the best seed for Canadian conditions is that produced in our own country. The Seed Division, therefore, co-operates with the provinces in conducting field crop competitions, combined seed crop and cleaned seed competitions, seed fairs, and provincial seed exhibitions, and makes subvention payments to the Provincial Departments of Agriculture for this account. Some changes were made in the plan for payment of these subventions in 1926, and the maximum amount made available from the Seed Branch appropriation for each of the competitions is shown as follows:—

Standing field crop competition	$ 50 00
Combined seed crop and cleaned seed competition	200 00
Local seed fair	50 00
Provincial seed fair	600 00

The total amount of subvention must not exceed $1,200 to each province having less than one million acres under field crops, and $1,200 pro rata for each additional million acres under cultivation in field crops, provided that the total subvention to which any province is entitled shall not exceed $1,200 pro rata per 100,000 of total population.

Provincial Departments of Agriculture are paid these subventions up to one-half of the prize money actually paid by the provinces. The payments are governed by regulations which have been amended from time to time for the purpose of improving the quality and increasing the quantity of the seed supply. Several millions of bushels of improved seed are produced annually as a result of these competitions and seed fairs.

From 1912 until 1926 subventions were paid by the Federal Department on the basis of two-thirds of the prize money, but with the revision of regulations requiring registered seed stocks for the combined seed crop and cleaned seed competitions, the Seed Branch has performed the inspections, the organization and other judging expenses being borne by the provinces, the total expenditures as paid by each province and the Dominion being thus approximately on a fifty-fifty basis.

The amounts paid by the Seed Branch to the provinces during the fiscal year were as follows:—

—	Standing Field Crop Competitions		Combined Seed Crop and Cleaned Seed Competitions	
	Number	Amount	Number	Amount
Prince Edward Island	.....	.....	3	$ 600 00
Nova Scotia	.....	.....	.....	.....
New Brunswick	.....	.....	10	488 00
Quebec	121	$ 5,700 00	54	5,000 00
Ontario	117	7,160 50	32	3,770 00
Manitoba	35	1,475 00	2	345 00
Saskatchewan	55	4,010 50	3	457 50
Alberta	4	310 00	.....	.....

—	Local Seed Fairs		Provincial Seed Fairs	
	Number	Amount	Number	Amount
Prince Edward Island	.....	.....	.....	$ 170 00
Nova Scotia	.....	.....	*1	170 00
New Brunswick	2	$ 105 23	.....	170 00
Quebec	.....	.....	1	600 00
Ontario	7	202 00	2	1,266 50
Manitoba	17	845 00	1	600 00
Saskatchewan	38	1,032 80	2	1,000 00
Alberta	14	536 75	2	403 50

*Maritime Seed Fair.

While amounts of subventions shown were paid during the fiscal year, such amounts were not all due on account of seed fairs and crop competitions held or conducted during that time. Some payments were made in the case of delayed subventions claims in order that all such claims might be brought up to date, and because amounts actually due these provinces had not previously been used.

In the case of British Columbia an annual grant of $2,500 is paid towards encouraging the production and marketing of field root and garden seeds. The Provincial Department of Agriculture authorizes the expenditure of an equal amount for this purpose.

The production of high grade seeds in Canada is steadily increasing in importance. Canadian-grown seeds command recognition on foreign markets by virtue of their inherent qualities of winter hardiness and vigour of growth, and because our standards of quality for graded seeds of all kinds are so highly regarded. Stocks of high-class seed of wheat, oats, barley, alsike clover, sweet clover, brome, Canadian blue, and browntop were available for export last year. There was a gratifying increase in the production of timothy seed in Alberta. In British Columbia the yield was somewhat less than the previous year. Average imports of this seed are about 5,000,000 pounds annually, but with further encouragement Canadian production will soon be equal to our requirements. Alfalfa seed showed a decrease in production due to adverse climatic conditions. Only enough seed was produced, together with the carry-over from the previous year, to meet home needs. Red clover seed production in Quebec, Ontario and British Columbia is increasing from year to year, due to encouragement given by the Dominion and provincial Departments of Agriculture and the demand for hardy, home-grown seed. Alsike seed production in the older districts of Ontario is keeping up in quantity, but not in quality. The newer districts of Ontario and Quebec are producing small supplies of cleaner seed. Tests are being conducted in Northern Manitoba and Saskatchewan to determine if alsike seed can be produced profitably in large

areas now free of troublesome weeds. Wild white clover seed obtained from England has been distributed throughout Canada for tests in connection with seed production and permanent pasture purposes. Results so far indicate that it is a valuable permanent pasture crop in the central provinces. Browntop or Rhode Island bent grass seed is produced in Prince Edward Island and Nova Scotia, and creeping red fescue and velvet bent grass in Alberta. Field root and garden vegetable seed production is making progress in British Columbia.

ASSISTANCE TO CANADIAN SEED GROWERS' ASSOCIATION

The Canadian Seed Growers' Association is a national organization of farmers who specialize in the production of Registered seeds. They multiply for commerce the foundation stock seeds called "Elite Stock Seed" produced by Dominion and Provincial Experimental Stations and sometimes by private growers. The association office functions as a registration bureau for seed crops, directs the work of the growers, and publishes a seed catalogue. Registered seed provides much of the seed stocks for field crop competitions, local seed fairs, and provincial seed exhibitions. Complete information as to the work of the association may be obtained from their annual report. Financial support from the Seed Branch was continued during the past year to the extent of $13,000.

FEED DIVISION

Under the provisions of the Feeding Stuffs Act 214 manufacturers registered 684 brands of commercial feeding stuffs during the registration year ending September 30, 1927, as compared with 206 manufacturers and 626 registered brands during the preceding year. They were distributed as follows:—

Province	Firms	Registrations
Alberta	21	37
British Columbia	40	148
Manitoba	9	21
New Brunswick	2	3
Nova Scotia	2	3
Ontario	94	353
Prince Edward Island	1	1
Quebec	19	71
Saskatchewan	6	10
Great Britain	4	6
United States	16	31
	214	684

The brands of registered feeding stuffs may be classified according to their nature or trade designation as follows:—

Animal products	85
Barley products	5
Beet pulp (dried)	6
Brewers' and distillers' products	19
Buckwheat products	1
Calf meals	31
Corn products	9
Cottonseed meal	23
Cattle feeds	36
Fish products	15
Horse feeds	4
Linseed meals and cakes	15
Milk products	2
Oats products	14
Peanut products	1
Pig feeds	19
Pigeon feeds	5
Poultry mash feeds	212
Poultry scratch feeds	72
Rabbit feeds	5
Rice products	7
Screenings and scalpings	32
Sheep and goat feeds	4
Soya bean products	4
Miscellaneous mixed feeds	51
Miscellaneous unmixed feeds	7

Products which are subject to the provisions of the Feeding Stuffs Act are classified into three groups, namely: commercial feeding stuffs, flour mill by-products from wheat, and chop feeds. Commercial feeding stuffs must be labelled by the manufacturer with the guaranteed chemical composition as well as the materials from which compounded. Mill feeds and chop feeds must conform to definite standards of quality and purity, and all feeds are subject to a uniform restriction against the presence of mustards, purple cockle, ergotized grains, or other seeds and materials injurious to the health of live stock or poultry. In order to check these feeding stuffs for compliance with the Act, 5,514 inspection visits were made during the year, and 1,473 samples were collected from manufacturing plants, wholesale and retail dealers, and submitted for chemical and botanical analysis. A number of manufacturers and dealers were warned for minor infractions of the law, and two firms were prosecuted.

In general there has been fairly satisfactory compliance with the provisions of the law, and the standards of quality and purity for millfeeds have been well observed. The scarcity and high price of concentrates, and particularly of millfeeds, during the spring of 1928 has extended the outlet for low-grade feed materials. This condition has resulted in the registration of quite a number of brands of feed of inferior feeding value, and in changing registrations to lower the quality and guarantees of established products. This latter practice is confusing to purchasers who buy a particular brand of feed on the strength of results obtained from former trials, rather than on the basis of its guaranteed ingredients and composition. A continuation of this practice might suggest the need for some restriction against lowering the guarantee of a registered brand of feed prior to the expiry of the registration year.

ELEVATOR SCREENINGS

The dockage removed from the western grain crop at the terminal elevators at Fort William and Port Arthur is classified on a conventional basis as follows:—

Elevator Screenings are the uncleaned or "elevator run" screenings.

Standard Recleaned Screenings consist chiefly of wild buckwheat and broken or shrunken wheat.

Oats Scalpings are composed largely of wild oats together with varying proportions of domestic oats, barley, and other coarse grains.

Refuse Screenings are the fine weed seeds, chaff and other offal removed in recovering the Standard Recleaned Screenings and Oats Scalpings.

The following table shows the quantities and distribution of the various classes of unground screenings originating at Fort William and Port Arthur during the crop years ending July, 1926, and July, 1927. To these figures should be added for the latter year about 250 tons of Standard Recleaned Screenings, 1,500 tons of Oats Scalpings, 850 tons of Elevator Screenings, and 2,560 tons of Refuse Screenings which were ground at the head of the Great Lakes.

—		Standard recleaned screenings	Oats scalpings	Elevator screenings	Refuse screenings
		tons	tons	tons	tons
Fort William District	1925–26	98	46	495	71
	1926–27	108	177	206	39
Eastern Canada	1925–26	19,348	22,642	400	.....
	1926–27	23,968	51,687	264	57
Western Canada	1925–26	3,009	.....	350	57
	1926–27	207	34	585	1,935
Exported	1925–26	4,897	40,428	4,591	63,923
	1926–27	.....	17,236	2,633	76,099
Totals	1925–26	27,352	63,116	5,836	64,051
	1926–27	24,283	69,134	3,688	78,130

The information regarding the distribution of screenings is based upon billing instructions covering shipments, and undoubtedly certain quantities, particularly of Oats Scalpings, consigned to Georgian bay and lower lake ports were again loaded out for export. A study of the data from which this table was compiled, however, indicates that the movement of screenings is directly affected by the yield of feed crops produced in the various sections of the country. Oats Scalpings for the first time last season found a new outlet in the domestic trade where the eastern crop was so poor. Standard Recleaned Screenings are steadily obtaining a wider distribution, particularly in Ontario and Quebec. As might be expected, the domestic demand for Refuse Screenings is confined to small quantities for feeding sheep in penned areas. There appears, however, to be an export market for this class of screenings equal to the supply, and over 61,000 tons were billed to Duluth during the past crop year.

HAY AND STRAW INSPECTION

The following table shows the quantity and grade of hay and straw inspected during the fiscal year in accordance with the provisions of the Inspection and Sale Act. Fees totalling $1,283 were collected for this inspection service, of which amount $398.80 was retained by certain inspectors whose only remuneration is the fee collected, and the balance was deposited to the credit of the Receiver General.

Kind	No. 1	No. 2	No. 3	No Grade	Rejected	Shipping Grade
	tons	tons	tons	tons	tons	tons
Timothy	132	1,976	1,301	436	369	16
Mixed	123	449	36	114	94	1,710
Clover	.....	8	.....	.....	.....	3
Straw	3	86	.....	128	31	58
Total	258	2,519	1,337	678	494	1,787

The 1927 hay crop was a record one both in Canada and in the United States. The market has been characterized by light demand and low prices, a condition which, in view of the heavy carryover in sight, will likely also obtain next season unless general or regional crop shortages occur. An expansion of the acreage devoted to hay production out of proportion to the increase in hay-eating live stock forecasts a continuance of this situation for some time to come. In Central and Eastern Canada there were harvested in 1927 about 1·46 acres of hay per hay-eating animal unit on farms (one horse or one cow, or seven sheep), as compared with about 1·30 acres in 1921. Moreover, although exact figures are not available, there has undoubtedly during recent years been a decrease in the city horse population owing to the increased popularity of motor vehicles both for business and for pleasure. Similar conditions prevail in the United States, Canada's principal export market for hay. Official sources of information indicate their hay acreage to be over-expanded and their city horse population to have decreased about 70 per cent since 1910. Hay receipts in Boston and New York are reported to have decreased 82 per cent from 1910-11 to 1926-27. In past years these and other eastern city markets have imported large quantities of Canadian hay.

Because of the growth of the dairy industry and a wider appreciation of the feeding value of legumes for all classes of stock, the market value of good quality alfalfa and clover has not fallen proportionately with that of timothy and other grass hays. Through correspondence, press articles, and demonstra-

tions at agricultural shows an effort has been made to acquaint market hay producers with the general situation. There is a growing interest in inspection on the part of producer shippers as well as receivers. The former are anxious to guard against the unfair rejection of shipments on arrival, and the latter want to be assured of receiving hay of the kind and quality suited to their purposes.

Markets and Fertilizer Division

MARKET REPORTING

The reporting of seed, feed and fertilizer markets was enlarged as to the number of items and the markets covered. Since the inception of this service changes and additions have been made to meet the public demand. The reports contain information as to current prices on the basis of the legal standards of quality provided in the various laws administered by the Seed Branch. Correspondents reporting market conditions and prices number about 1,500, and more than 100 principal markets, Canadian and foreign, are covered.

The following phases of this service are now provided:—

(*a*) The publication in English and French of an eight-page report printed bi-weekly and entitled Seed, Feed and Fertilizer Markets;

(*b*) The preparation of monthly statements regarding markets for publication in the bulletins of agricultural statistics, and the Trade Year Book issued by the Dominion Bureau of Statistics;

(*c*) The preparation of weekly statements for publication by the press;

(*d*) Correspondence in which information is given farmers and the trade regarding prices and market prospects.

In each issue of the pamphlet Seed, Feed and Fertilizer Markets there are involved about 900 price quotations of 216 items. In addition, detailed statements of exports and imports are given by provinces. The latter information is procured direct from the Statistical Branch of the Department of National Revenue.

The correspondents reporting the condition of domestic markets are representatives of wholesalers, jobbers, retailers and farmers who have a definite interest in the trade of the commodities reported. The prices and other information provided by them are based on the grades or qualities defined in the Acts which control the sale of the various commodities. Prices and information from markets abroad are based on the respective grades and qualities recognized in the various countries, and are secured by the co-operation of the Canadian Government Trade Commissioners and wholesale dealers in those countries.

A cable service is arranged with the following countries: Great Britain, France, Germany, Belgium, Holland, Denmark, Czechoslovakia, Italy, Argentine, Chile, and New Zealand. Almost daily communication is maintained with the Bureau of Agricultural Economics, Washington, D.C., regarding markets in the United States.

During 1927 about 7,100 English and 5,100 French copies of the pamphlet Seed, Feed and Fertilizer Markets were distributed bi-weekly to subscribers, correspondents and officials. The information was widely quoted by the general press as worthy of interest to their readers.

The effect of this service is seen in greater public demand for the higher grades and qualities of the commodities reported, and in the levelling of prices according to freights and other distribution charges throughout the country. The reports also serve as a valuable price guide to seed and feed producers when placing their products on the market. The feed quotations permit the live stock producer to figure comparative costs of rations for current use.

FERTILIZERS

The number of brands registered during the year ending June 30, 1928, was 342 as against 293 in the previous year. The registration fees collected amounted to $9,030. The number of registrations by provinces or countries, and the number of firms, were as follows:—

	Firms	Registrations
Prince Edward Island	1	2
Nova Scotia	3	25
New Brunswick	4	6
Quebec	4	18
Ontario	14	148
Manitoba	0	0
Saskatchewan	0	0
Alberta	1	12
British Columbia	11	35
Great Britain	4	5
United States	12	91
	54	342

The 342 brands eligible for sale might be classified according to general character as follows:

1. Mixed fertilizers complete 233
2. Mixed fertilizers containing only two of the three plant food elements 95
   (*a*) nitrogen and phosphoric acid 49
   (*b*) phosphoric acid and potash 46
3. Fertilizers containing only one of the three plant food elements and not exempt from registration under section 8 of the Fertilizers Act 14

Practically all the brands on the market were inspected one or more times, and the results of analyses of the samples taken by the inspectors were compiled and issued to the interested public in bulletin form.

Offences against the provisions of the Fertilizers Act were comparatively few, and mostly of a minor nature. Incorrect labelling and abuses in regard to selling under prescription were the principal offences, other than failure to meet guaranteed analysis.

Microscopic analysis was again resorted to in determining the adulteration of certain fertilizer materials. In this way some samples of bone meal were found to be adulterated with ground natural rock phosphate, acid phosphate with ground limestone, and tankage with humus and other decomposed vegetable matter. It is evident that microscopic analysis will prove more and more serviceable in detecting the adulteration of fertilizer materials.

Some amendments were made to the regulations to provide for greater deficiencies in the phosphoric acid of organic fertilizers, such as tankage and fish meal, and of basic slag. These fertilizers are naturally variable in composition and the limit of deficiency was increased from one half of one per cent to one per cent. This change is proving satisfactory in safeguarding the interests of the public and the trade.

Provision was also made for natural variability in the fineness of basic slag. Innumerable tests had shown that there was up to 10 per cent variability in the fineness of a given shipment, and this figure was established as the limit.

A careful study of the fertilizer trade in all its aspects culminated in amendments to the Act which are to become effective on July 1, 1928. These amendments were found necessary in order to make the administration of the Act more effective, to further improve the quality of fertilizer offered by the trade, and to safeguard the interests of the purchaser.

Provision was made to prevent evasion of registration when a fertilizer is sold before being manufactured or imported. A new subsection was added to section 3, requiring that a foreign manufacturer who sells fertilizer in Canada must nominate a resident Canadian agent who will take full responsibility for compliance with the Fertilizers Act in his behalf. This was recommended because agents of some United States companies sold fertilizer in Canada and returned home before it was delivered.

The minimum standard of plant food in mixed fertilizers was raised from 12 per cent to 14 per cent, and provision is made to prevent the sale of fertilizers and related materials under extravagant and misleading advertising. The percentage of anhydrous borax permitted in potash salts has been raised from 1/10 of 1 per cent to 1 per cent. Fractions of percentages must not be stated in guaranteed analyses. Three sections were added to the Act to strengthen prosecution proceedings for illegal labelling, and to permit confiscation of fertilizers sold in violation of the Act.

Fertilizer demonstrations were continued in the counties of Richmond, Wolfe, Megantic, and Beauce, in the province of Quebec. They were planned with a view to educating the farmers how to use standard fertilizers profitably on their own farms. Two hundred and nine farmers participated in the demonstrations with turnips, and two hundred and twenty-nine with forage crops. The farmers paid one-half the cost of the fertilizer and the department the other half. The money was paid to the agricultural societies conducting the demonstrations, who in turn reimbursed the farmers for one-half the cost of the fertilizer. The total amount paid to the agricultural societies was $1,800. The field supervision was provided by the district inspector for Quebec.

The subvention agreement with the provincial Departments of Agriculture now includes provision for the payment of moneys for fertilizer demonstrations. The main feature in this new agreement permits the provincial Departments of Agriculture to use the subvention money in paying the cost of fertilizer demonstrations conducted by agricultural societies under provincial supervision. Quebec and British Columbia are already utilizing subvention money for this purpose.

The Maritime District

This district comprises Nova Scotia, New Brunswick and Prince Edward Island, with headquarters located at Sackville, N.B. The staff includes a district inspector and six inspectors, three of whom are employed the whole year, and the other three as needed during the busy season, especially in the spring. The permanent inspectors are located at points most convenient for their work. One of the temporary inspectors was appointed during the latter part of the year to take care of the work in the northwestern part of New Brunswick, where a bilingual man is required.

SEED PRODUCTION AND SUPPLY

The late, cold spring and wet weather during the latter part of the season resulted in the 1927 grain crop being almost a failure. In Prince Edward Island, where good seed oats are generally available for both local demand and export, only 11,958 bushels of No. 1 grade were given inspection certificates and they were somewhat discoloured from weathering. There was a shortage of over thirty thousand bushels, which were obtained through the Prince Edward Island Potato Growers' Association. The whole lot was No. 1 grade, bought from the Alberta Seed Growers' Association. In the other two provinces the oats were also obtained from the West, but consisted mostly of No. 2 C.W. recleaned, offered by dealers and agricultural societies. An occasional car of No. 1 and No. 2 seed oats was found in the hands of the dealers, but the price was very high and the inferior oats found a ready market throughout New Brunswick and Nova Scotia.

Field inspections were made for 277 growers of browntop seed in Prince Edward Island. From the quantity of "seed in the chaff" sent to the cleaning plant at Charlottetown 28,150 pounds of seed were cleaned and graded for market. On the first test quite a number of the samples were graded No. 3 or Rejected, but after bulking these lots and recleaning a government grade was obtained on all samples.

The Canadian wholesale prices received for this seed were 75 cents for No. 1 and 60 cents for No. 2. The United States prices averaged about 50 cents per pound, and sales there were made on samples representative of the lots offered from time to time. The 1927 crop was only thirty per cent of the previous year, and the smaller quantity, with a carryover from 1926, found a ready market. The harvesting of browntop or Rhode Island bent to meet the demand for turf grass seed has been extended from seven growers in 1924, and is bringing good returns to the farmers in localities where the soil is light and rather low in fertility.

One clover seed competition was conducted in Antigonish county in Nova Scotia. The results, considering the year, were satisfactory. Clover seed of good quality can be grown successfully in some parts of these provinces.

Swede turnip seed is grown commercially in Nova Scotia. Last year 800 pounds were registered and sold locally at a very good price. The demand for home-grown seed is far above the supply, and farmers should be encouraged to increase production.

The quantity of Registered oats inspected and sealed was 1,420 bushels, Owing to the limited local market for high-class seed, the number of growers of Registered seed grain has not increased during the past year. The price asked for Registered seed is generally high, and few farmers are willing to pay from 75 cents to $1 more per bushel for this grade when other seed with fair germinating ability is available.

Ten combined competitions were organized by the provincial Departments of Agriculture in co-operation with the Seed Branch. The number of samples collected was 166, of which 116 graded No. 1, 12 No. 2, 15 No. 3, and 23 Rejected. Eighty-seven of the samples were collected on the Island and all graded No. 1 without impurities of any kind, which shows that this work has made better progress there than in the other two provinces.

Besides the Maritime Winter Fair held in Amherst, two fairs were held in New Brunswick and one on the island. The Amherst Fair, considering the bad season, was fairly good. The Moncton Fair was not as good as usual, the number of exhibits being small and the quality poor. At Bathurst the fair was better than in Moncton, especially in the quality of the exhibits.

The Island Seed Fair was held during Farmers' Week. The system followed there is different from the other provinces. The exhibits are taken from the farmers' bins by an inspector in the course of his inspection in connection with the combined competitions. The samples thus truly represent the quality of the seed prepared from the competitions and offered for sale. This system affords a perfect control of these competitions, and no doubt largely accounts for the good results shown on the island in connection with this work.

INSPECTION

In connection with the enforcement of the Seeds Act, 982 visits were made to dealers in seed. Large quantities of No. 2 C. W. recleaned oats were sold again, but as these oats are generally offered for sale as feed, only a few violations were reported. Small quantities of No. 1 and No. 2 seed oats were generally found to be within the requirements of the law. One prosecution was undertaken, and the decision of the court was against the defendant, who paid the

fine and costs of proceedings. Garden seeds found on the market are generally purchased from reliable seed houses, and no violations were reported in this connection.

The inspectors also examined stocks of feeding stuffs in the hands of the dealers. The reports show that 562 feed dealers were visited during the year and only 11 official samples were taken. Feeding stuffs sold in the Maritime Provinces are mostly from large mills in Montreal or farther west, and generally meet the guaranteed analysis.

Two hundred and eighty official samples were taken from fertilizers offered in the trade. This Act does not seem to be as well observed in the Maritime Provinces as other laws administered by the branch. There were several violations and three prosecutions were taken to court. The decision in each case was given against the defendant. In view of the large quantity of commercial fertilizers purchased, the number of violations may be considered as small. There has been a great improvement in the quality of fertilizer offered within the last few years, due largely to the severe application of the law, which is appreciated by the public in general.

Hay inspection was introduced here last fall for the first time. Official certificates were issued on forty-one cars. The inspection was done mostly in the Sackville district and in Carleton county. In addition to inspecting cars, numerous visits were made to farmers' premises, where hay was examined and opinions given to those interested. All except a few cars were graded No. 2 Dyke and No. 2 Timothy.

The hay crop in New Brunswick and Nova Scotia was very poor in 1927. Heavy rain storms during the cutting period made it almost impossible for farmers to produce hay of even fair quality. A high percentage of the crop, especially that produced from the marshes, would not grade No. 3. Hay growers in the Maritime Provinces, especially those in the marshy districts, generally cut their hay too late, which results in a high percentage of ripe weeds and fine dead grasses. This hay is difficult to sell on any market, even at a low price. Our inspectors spent a good deal of time in demonstrating the value of grading. This work has already given good results in the improvement of conditions.

EDUCATIONAL WORK

The inspectors gave addresses at important agricultural meetings. They also acted as judges at seed fairs and lectured on subjects pertaining to seed production and legislation. The Seed Branch organized an attractive educational exhibit at the Amherst Fair. The farmers appeared to be very much interested, and many questions were asked of the inspector in charge.

An inspector spent nearly two months on the Nova Scotia Seed Cleaning Train. He had exhibits of clover seed which served as a basis for instruction, grains of various grades, and samples of fertilizers. Lectures were given on the work of the Branch at the various places where the train stopped for meetings.

Two papers were read from the radio station at Fredericton. Four hay meetings were held at Sackville and were attended by representatives from Nova Scotia and New Brunswick. The discussions at these meetings were based on the legislation, classification and inspection of hay. A committee was appointed representing both producers and dealers, and the district inspector was invited to attend its meetings.

Quebec District

This district comprises the province of Quebec with the exception of Pontiac and Wright counties. There are five sub-districts, each with an inspector located at a most convenient point and responsible to the district

inspector at Quebec city. The sub-districts are Montreal and Eastern Townships, Three Rivers, Beauce, Eastern Quebec, and Quebec city with Lake St. John and Abitibi. One inspector is employed nearly all the year at the Quebec office to grade seed and assist the district inspector in supervising the work. During the spring season a temporary inspector is appointed for the district of Montreal where the work becomes too heavy for one man.

SEED PRODUCTION AND SUPPLY

The snow disappeared very early in the spring, but seeding operations were delayed by almost continuous rain through the month of May. In certain districts seeding was not commenced before the first days of June. The Montreal district was more favoured, and most of the farmers there were able to get through the seeding before the rain started. Weather conditions during September were very favourable for the harvest. The yield and quality of seed crops were generally satisfactory, but an exception must be made for the districts producing seed grain, as only ten carloads were available this year against twenty-five carloads last year.

The clover seed crop gave an average yield of fairly good quality. Some centres, namely, Chateauguay, Vaudreuil and Soulanges, where large cleaning mills were operated under the supervision of the provincial Department of Agriculture, produced 60,000 pounds of red clover seed which was graded by our inspectors at shipping points. Nearly sixty per cent of this seed was sealed as grade No. 1, thirty per cent graded No. 2, and ten per cent graded No. 3. Auctions were organized after the inspection, and sales were made at very remunerative prices to the growers.

Many farmers in the districts of Joliette and Vaudreuil are still making a specialty of growing timothy, and were able to supply the market with seed of superior quality. Four carloads of timothy seed were shipped from Joliette county.

The shortage of seed oats was somewhat lessened by the large supply which certain firms had carried over from the previous year; but some districts were unable to obtain early varieties of oats and a large quantity of No. 2 C. W. recleaned was sold for seed through Eastern Quebec and other points where seed oats were required.

The combined seed crop competitions were continued during 1927. The following table gives the number of competitions for each crop and the percentage of seed in each grade:—

—	No. of competitions	No. 1	No. 2	No. 3	Rejected
		%	%	%	%
Wheat	57	19·3	7·0	8·6	65·1
Oats	882	33·0	10·2	18·6	38·2
Barley	85	24·7	4·7	14·1	56·5
Clover	715	23·4	29·2	23·3	24·1

There was an increase in the quantity of registered seed. Inspections were made as follows:—

		Registered	Extra No. 1
Oats	bushels	1,330	317
Wheat	"	272	.....
Barley	"	112	142
Peas	"	75	.....

The Alaska oats were in great demand, but the quantity was too limited to supply the needs of the farmers in Abitibi, Lake St. John and other counties of the lower St. Lawrence, where this variety becomes more and more popular. Over 500 bushels of Alaska oats were registered and 2,500 bushels were sold as grade No. 1.

INSPECTION

The inspectors covered 800 points and visited 1,350 merchants or dealers divided as follows: 396 seed, 639 feed, 288 fertilizer, and 25 hay. Inspections were made of the Provincial Seed Fair exhibits at St. Hyacinthe, and 425 exhibits were graded by our inspectors for the auction sale which took place on the last day of the fair. The germination tests of the samples showed that a number of the exhibits, especially timothy and clover, were low in vitality, and some lots, although of very good appearance, were quite unsuitable for seeding. The quantities of seed oats inspected at shipping points were 10,015 bushels of grade No. 1 and 5,000 bushels No. 2.

The official samples taken from lots inspected in the trade were 292 seed, 80 feed, 114 fertilizer, and 2 binder twine. Prosecution was taken against a dealer for selling some carloads of oats with a very low percentage of germination. He pleaded guilty and was condemned to pay fine and costs. Prosecution was recommended against a wholesale firm for selling some thirty boxes of garden seeds not marked to show the low germination, but the Canadian office was found to be closed and the representatives had returned to the United States. Every merchant in Quebec who was found to be in possession of these seeds withdrew them from the market. The violations on feeding stuffs were of minor importance and no prosecution was recommended. The fertilizer dealers are exercising better care, and no important violation was reported by our inspectors.

There was less demand for hay inspection because the market for export was very limited. The United States had a good crop, prices offered to Quebec hay growers were low, and very few carloads were shipped to the American market as graded hay.

FERTILIZER DEMONSTRATIONS

This special work with fertilizers, inaugurated four years ago, was continued, and 438 farmers took part in the demonstrations with swede turnips and green fodder. Phosphate fertilizer and muriate of potash were applied at the rate of 500 to 600 pounds per acre in addition to farm manure. A plot where only farm manure had been applied served for comparison. The results show that fifty per cent of the farmers averaged 23 tons of turnips per acre; with fodder crops the average yield was 2·8 tons per acre. The farmers taking part in the competitions were very much interested in the work, and most of them will continue to grow these crops.

EDUCATIONAL WORK

The inspectors attended the most important agricultural meetings in their respective districts, and gave addresses on subjects pertaining to their work. Articles on various agricultural topics were published in the agricultural papers. Exhibits prepared to depict Seed Branch activities were placed at the Provincial Seed Fair.

EASTERN ONTARIO DISTRICT

Ottawa is the headquarters for the district which comprises Old Ontario east of York County and the Canadian National Railway running from Toronto to North Bay, New Ontario to Lake Nipigon, and Wright and Pontiac counties and the Ville Marie district in Quebec.

SEED PRODUCTION AND SUPPLY

The supply of seeds produced in eastern Ontario varies with the season. The cereal crops were generally good. In some localities rust was bad on the late oat crop, and scarcely any of it was fit for seeding, especially on the low flat lands in eastern Ontario and along the Soo line in northern Ontario. There was another big hay crop and a lot of the timothy was allowed to go to seed. This seed crop was a record for the district, and a large carryover from 1926 helped to depress the local market.

Early sown oats and barley were excellent crops and were harvested in good condition. The pea crop gave an average yield and the quality was good. Alsike and alfalfa seed were below the average in yield and of inferior quality. Red and sweet clover seed were quite plentiful and of good quality. In northern Ontario some of the seed crop was caught in the early snow which remained throughout the winter.

INSPECTION

There were 2,123 visits made to various points in the district and inspections included 2,384 for field crops and seed, 550 feed, 27 fertilizer, and 5 binder twine. The inspectors took 218 official samples of seed, 115 feed, 15 fertilizer, and 5 binder twine. Many minor violations of the Acts concerned were settled by satisfactory adjustments. Two cases of violation of the Seeds Act were taken to the courts and the violators condemned.

The combined seed crop and cleaned seed competitions numbered 16 in barley, 2 in oats, 1 in spring wheat, and 1 in red clover. Some 240 growers had 3,545 acres in registered seed crops, with an estimated yield of over 100,000 bushels of seed grain. From the Ottawa Valley alone some 100,000 bushels of malting barley were shipped to Montreal, largely as a result of the barley competitions.

Following is the quantity of seed finally inspected and graded:—

		Registered	Extra No. 1	No. 1
Wheat	bushels	928	125	.....
Oats	"	1,907	886	1,020
Barley	"	2,359	2,636	1,393
		5,194	3,647	2,413

EDUCATIONAL WORK

The inspectors judged seeds, field roots, garden vegetables, and plants at several of the exhibitions and county and township shows. They assisted at a number of short courses in agriculture, explained the requirements of the Acts administered by the Seed Branch, and gave addresses on seeds, weed seed impurities, and cleaning machinery. Advice was given to operators of seed-cleaning plants, and several more machines were installed in the district during the year.

Assistance was given to the Ottawa Valley Seed Growers' Association, and a very successful seed exhibition was held under its auspices at Renfrew early in February. Over 300 exhibits were sent by about 100 exhibitors. Most of the seed grain was Registered or Extra No. 1, or was descended from such parentage. The Quinte Seed Fair held at Cobourg about the middle of March scored a success in the number and quality of exhibits, and the disposal by sale.

Keen interest was taken in making final awards in the presence of the field crop competitors, and the occasion furnished the opportunity for discussing the whole seed situation. Special attention was given to weaknesses in the production of good seed, both in field operations and in threshing and cleaning facilities.

Western Ontario District

This district includes Old Ontario west of and including the counties of York, Simcoe, Muskoka, and Parry Sound. The district office and seed laboratory are located in the Seed Branch Building at 86 Collier street, Toronto. The district personnel consists of a district inspector, six inspectors, and a clerical staff. Three inspectors were stationed at convenient points in sub-districts, and three were required at headquarters to grade samples received at the laboratory, to sample seeds being imported, and to inspect the products under the different Acts.

SEED PRODUCTION AND SUPPLY

The continued decrease in acreage devoted to the growing of corn for husking is expected to give place to increased production in 1928. The situation in regard to alfalfa seed was quite the reverse of the large crop of 1926. Continued wet weather during the summer and fall of 1926, followed by an unfavourable winter, damaged much of the crop and destroyed a considerable acreage. Unfortunately the best seed-producing areas suffered heavily. This damage was not the result of ordinary winter killing, but was due to a series of unfavourable conditions for a period of about nine months. The seed crop failure on remaining fields was not caused by this condition, but by the weather being unfavourable to the setting of seed. The wheat crop was good, although the grain in some localities was not as plump as desired. Barley was excellent, and the oat crop was a good average. The crop of red clover seed was the largest in several years and was of good quality. The quantity of alsike seed was greater than that of 1926, but the quality was comparatively poor. Sweet clover seed was of good quality, and more timothy seed was produced than for several years.

INSPECTION

Visits were made to 1,139 points, and inspections included 1,594 seed, 1,241 feed, 229 fertilizer, 28 binder twine, and 608 hay and straw. The total number of official samples taken by inspectors was 3,300 seed, 384 feed, 354 fertilizer, 53 binder twine, and 10 paris green. Field crops inspected totalled 3,108 acres, including 1,298 acres of oats, 169 of barley, and 651 of alfalfa, and lesser quantities of peas, beans, wheat, corn, and roots. There were 6,171 bushels of seed inspected for market as follows:—

		Registered	Extra No. 1	No. 1
Wheat	bushels	349	.....	.....
Oats	"	1,372	1,180	.....
Barley	"	781	160	.....
Peas	"	70	.....	.....
Corn	"	37	43	.....
Flax	"	.....	.....	1,200
Soy beans	"	28	.....	.....
Alfalfa	"	.....	.....	951

Inspectors examined and graded 2,215 tons of hay and 244 tons of straw. There were 13,068 samples of seed analyzed, an increase of nearly 2,000 over the previous year. Farmers are taking more interest in the quality of seed, and this will be furthered by a campaign for better seed which is being conducted by the provincial Department of Agriculture. Farmers have been advised to have seed tested to determine its purity and vitality, to sell in accordance with the requirements of the Seeds Act, and to use only the best seed obtainable. Total imports of seed were 10,957,171 pounds. There were seven prosecutions under the Seeds Act, one in connection with binder twine under the Inspection and Sale Act, and one under the Fertilizers Act.

EDUCATIONAL WORK

Most of this work was done in co-operation with provincial authorities. Inspectors acted as judges at fairs and exhibitions; served on seed committees, and gave addresses at meetings on subjects pertaining to seed crops, weeds, feeds, and fertilizers. Assistance was given with the Better Seed Train which was run through part of western Ontario, and in connection with the Better Seed Campaign commenced in January, 1928. The district inspector continued to act as chairman of the crop improvement committee, which body again functioned as the Provincial Seed Board.

Manitoba and Saskatchewan District

The district includes all of Manitoba and Saskatchewan, and Ontario west of lake Nipigon. The inspection office and laboratory are located at 812 Commercial Building, Winnipeg, and sub-offices are maintained at 211 Grain Exchange Building, Fort William, and at the Post Office Building, Regina. Permanent inspectors are employed at Fort William, Regina, Moose Jaw, Saskatoon and Winnipeg, and seasonal inspectors at Brandon and Winnipeg.

SEED PRODUCTION AND SUPPLY

Conditions in the spring of 1927 were very unfavourable. There was excessive moisture which in eastern Manitoba kept the farmers off the land until well into June. Western Manitoba and Saskatchewan were able to sow their seed in fair time and had a good crop season. The summer rains produced an excellent growth, and, as might be expected when moisture is fairly abundant, considerable damage was caused by rust. In this connection it is interesting to note that Durum wheat and oats were affected to practically the same extent as the common wheats. Early frost caught many late crops all over the district, and a tremendously high wind storm, on September 15, shelled all the sweet clover which had not been cut for seed and much of what was in the stook.

Harvesting weather was fairly good, but oat and Durum wheat yields were decidedly below the average. Reports on oats threshed indicated a weight per measured bushel ranging from 18 pounds upward. Tests were immediately commenced to ascertain whether or not these light oats could be safely used for seed. The germination was high, but warning was given to farmers of the chance they would be taking with adverse climatic conditions in the spring. Durum wheats were tested and the average germination on control samples submitted up to March 1 was found to be 82 per cent. This was 7 per cent below the average for last year, and with the coming of warm weather a further falling off in vitality was noted. Some anxiety was felt this spring when the demand for oats, Durum wheat and barley was rather keen in southern Saskatchewan and Manitoba. However, oats from northern Saskatchewan and Alberta were shipped in by the elevator companies and wheat pools, and the majority of districts were supplied. A decrease in the acreage sown to oats is expected for 1928.

INSPECTION

There was an increase in the number of seed crop inspections, but a decrease in the acreage. Field inspection of brome and western rye was made to certify seed as free from couch grass. Reports on registered seed crops indicate an improvement in the purity of varieties. Inspection of seed crops for registration necessitated visits to 355 points, 620 farmers, 1,025 fields, totalling 20,982 acres. In connection with certification of brome and western rye grass, 64 farmers with 3,789 acres were visited, but only 46 fields were approved. From

these crops inspectors graded and sealed in sacks the following quantities of seed:—

		Registered	Extra No. 1	No. 1	No. 2	No. 3
Wheat	bushels	27,161	28,648	18,380	883	1,500
Oats	"	17,186	12,862	38,294	31,233	1,925
Barley	"	6,493	2,147	1,357	16	.....
Flax	"	374	391	1,598	14	23
Rye	"	18	30	.....	.....	.....
Sweet clover	lbs.	1,706	.....	8,675	185	.....
Brome		.....	.....	139,402	.....	.....

Inspectors visited 1,299 points. Store and warehouse inspections totalled 2,935 for seed, 921 feed, 13 fertilizer, 26 hay, and 21 binder twine. They took 503 official and investigational seed samples, 327 of feeding stuffs, 11 of fertilizer, and 63 of binder twine. An extensive correspondence was carried on suggesting methods of recleaning seed and soliciting compliance with the regulations. Seven prosecutions were successfully conducted against previous offenders. Many offences were due more to carelessness than a desire to evade the regulations. Binder twine inspections indicate several cases of shortage in the length per pound. Seed and binder twine importations were inspected through the co-operation of customs officials. The only difficulty experienced was in connection with corn shipments which did not come up to the previous germination tests or minimum standards.

Revenue was collected as follows: for analysis and grading, $1,482.50; hay inspection, $18.50; field crop inspection, $3,730.03; seed inspection, $2,305.23; total, $7,536.26.

EDUCATIONAL AND DEVELOPMENT WORK

Seed advertisements were checked to ascertain if advertisers had received a grade on their seed. All who had not submitted samples were informed regarding the regulations. They usually replied to our letter and sent a sample of the seed for test. Most of the advertisements were in order, probably due to previous advice and to articles which were written for country papers.

Our inspectors took an active part in the Better Seed Campaigns of Saskatchewan and northern Ontario. In Manitoba lists of graded seed were prepared and an attempt was made to check up on the results of previous campaigns. Numerous meetings were addressed by the inspectors, and they judged at many seed fairs, including the Provincial Corn Show in Saskatchewan and the Provincial Seed Exhibition at Brandon. An exhibit was prepared to depict the work of the branch at the T. Eaton Co. Soil Products Exhibition.

A course of instruction was given to the inspectors just prior to field crop inspection. The course included three days at Manitoba Agricultural College, two days at Morden Experimental Farm, and one day in the Winnipeg office. At Morden inspectors were able to examine rod rows planted from seed of each stock graded Registered and Extra No. 1. They also visited growers experimenting with test plots of new varieties. Field inspection of seed crops formed the basis of educational work with those attempting production of Elite Stock Seed.

Two hundred pounds of Manhardy and one hundred pounds of Altaswede red clover were distributed in lots sufficiently large to sow one acre. The districts selected were Beausejour, Whitemouth, Piney, Arborg, Reaburn and Swan River in Manitoba, and Devlin, Ontario. A check-up on growers who received timothy seed the previous year indicates that wherever a good catch was obtained the growers fulfilled their agreement to return to us the same amount of seed as they had received.

ALBERTA AND BRITISH COLUMBIA DISTRICT

The organization in this district includes an inspection office and seed laboratory at Calgary and a sub-district inspection office at Vancouver. The

chemical analysis of feeds and fertilizers is done at Ottawa. The district work includes the grading and reporting of samples of seed received for analysis; examination and grading of bulk and sacked seed grain, seed crop inspection; seed, feed, fertilizer, hay, straw, binder twine, insecticide and fungicide inspection; and investigation of seed supply. The inspections now required under the several Acts make it necessary for the district inspector to spend practically his entire time on administration and office interviews. The district office, being centrally located in the farming area of Alberta, is readily accessible to growers wishing advice and information. The total of 11,098 samples graded during the year required the entire time of one inspector in the busy season.

There are six permanent or seasonal inspectors, located at principal points throughout the district. The permanent inspector in British Columbia is also a vegetable seed production specialist. The total revenue collected was $5,106.93, including $1,305.35 for laboratory service and grading and $3,801.58 for inspection service.

SEED PRODUCTION AND SUPPLY

Favourable weather conditions prevailed in British Columbia until after the crops were cut. Excessive rain made it practically impossible to get crops cured and threshed, and resulted in a shortage of high quality seed grain. The Dominion and provincial officials again co-operated to increase root and vegetable seed production. The permanent inspector in British Columbia devoted a great deal of his time to this work and made reports on crops eligible for registration. Officials and growers realize that only through the production of Registered and Extra No. 1 grades of seed can the industry be made profitable, and efforts are being directed accordingly. British seed houses are increasing contracts with the more experienced growers of vegetable and flower seeds.

Although much larger areas of red clover and alsike crops were left for seed in the coast district, the wet weather affected the setting of the seed and caused a large percentage of the crop to rot on the ground after being cut. Threshing gave low yields and poor quality. In northern British Columbia the season was dry and gave reduced yields of timothy seed. Owing to the low prices offered, many of the growers could not thresh their seed, and the association cleaned only what could be marketed profitably.

Exceptionally promising prospects prevailed in Alberta until about fifteen per cent of the grain crop was threshed. Wet weather set in and delayed operations. It is estimated that forty million bushels stood in the stook all winter and a large part of the crop graded low on account of frost injury and excessive moisture. These conditions made it advisable to check up on the suitability of the grain for seeding purposes. Many samples of wheat, oats and barley were taken by the inspectors and tested for germination. The results were given wide publicity and farmers were advised to have their seed tested before using. Although many lots were unsuitable for seed, the investigation indicated that the supply would more than meet requirements, and large quantities of seed oats were later shipped to the eastern provinces.

A large increase in timothy seed production in the Pincher Creek district resulted from favourable weather conditions. The co-operative growers' organization constructed a new cleaning plant with up-to-date machinery, valued at ten thousand dollars. The total production of timothy seed is estimated at one million pounds in the Pincher Creek district, and three hundred thousand pounds in other parts of Alberta. The continued low prices for this seed will doubtless result in decreased production another season.

The Peace River district again produced our best quality seed. Herman Trelle took Grand Championships at the Chicago International Hay and Grain Show in 1926, and secured Grand Championship on his oats and Reserve Grand

Championship on his wheat exhibits in 1927. These continued winnings are attracting much attention to this district.

The wet season prevailing in Alberta was unsatisfactory for alfalfa seed production. In the Brooks district growers produced only about 25,000 pounds, which are needed for local requirements. The weather delayed the cutting of the hay crop at Brooks, and the quality was further injured through bleaching. Timothy and alfalfa hay in the Lethbridge district were of excellent quality and yields were much heavier than last year.

Seed importations for this district are largely received through the ports of Victoria and Vancouver. These ports are two days' distant by rail from the Calgary laboratory, and customs samples must be given precedence over all other work in order that shipments may be released as speedily as possible. The customs officials have co-operated with us in giving prompt service.

INSPECTION

The areas inspected were 10,737 acres in 325 fields of cereal grains, and 1,924 acres in 94 fields of alfalfa. The following quantities of seed were finally graded for market under seed inspection certificates:—

		Registered	Extra No. 1	No. 1	No. 2	No. 3
Wheat	bushels	8,165	11,993	6,597	2,461	1,529
Oats	"	11,800	6,165	4,119	3,036	1,807
Barley	"	640	336			
Alfalfa	pounds	7,411	3,337			
Creeping red fescue	"		560			

The inspectors visited 1,340 points; 2,185 inspections were made under the Seeds Act and 506 official samples were taken. These indicated that the quality of the seed sold by seedsmen is steadily improving, and the demand is increasing for only the higher grades of seed. Special attention is given to seed offered for sale by farmers because many of them still appear to be unfamiliar with the requirements of the Act.

Under the Feeding Stuffs Act, 1,621 inspections were made and 548 official samples were taken. Flour mill by-products and commercial feeding stuffs of which they are the principal ingredients were generally below the standard. Manufacturers claimed that the poor quality of the 1927 wheat crop was responsible for the deficiency.

All fertilizers manufactured and sold in the district were carefully checked, and the analyses indicate that manufacturers in general are endeavouring to place their products on the market in accordance with the requirements. A few errors in labelling were in evidence and these were brought to the attention of the manufacturers concerned. Fertilizer inspection visits numbered 255, and 144 official samples were taken.

Very few requests were made for the inspection of hay and straw. Dealers do not appear to be in sympathy with the present grade standards. Six visits were made under this Act.

Binder twine was also carefully checked and forty-one samples were taken for test. In a few cases the length per pound was found to be less than the manufacturer's guarantee but within the deficiency allowed by the Inspection and Sale Act.

The Agricultural Pests' Control Act has been explained to manufacturers and dealers handling economic poisons, with a view to having them take immediate steps to comply with the new requirements.

EDUCATIONAL

Fertilizer demonstrations in co-operation with the provincial Department of Agriculture were carried on in British Columbia. One seed crop and cleaned seed competition was organized in northern British Columbia.

Many press articles, radio talks and addresses were given by the district inspector on topics relative to the work. The senior inspector gave to the students at the Olds School of Agriculture a short course of lectures on the different Acts administered by the branch. Other inspectors gave addresses at agricultural meetings throughout the district.

Exhibits representing Seed Branch activities were displayed at provincial seed fairs in both provinces and at the Alberta Corn Show.

One permanent inspector attended a hay grading school at Kansas City last fall, which very materially increased his knowledge of this work.

INVESTIGATIONAL

Investigation work was again carried on in different areas in Alberta and British Columbia to ascertain the quality of the seed used by farmers. Samples were collected direct from seed drills. The three years' results of analyses have now been compiled as to viability and purity of variety. A complete report has been submitted for publication in pamphlet form. Due largely to the results secured in the above investigation, the provincial Department of Agriculture organized a Province-wide Better Seed Campaign. This work will undoubtedly result in much improvement in the quality of the seed used.

In the trial plots connected with the branch office all the samples of wheat collected from drills were grown to determine the percentage of mixtures. A large number of samples of vegetable seed were tested to determine the trueness to variety name.

In order to determine the various types of wheat of different varieties. samples of all registered seed were collected from growers. These were tested out at the Experimental Farm, Lethbridge, and the results secured were used for instruction purposes for field inspectors.

Additional investigational projects with seed grain include "The Viability of Oats Produced in Alberta" and "The Damage to Wheat Caused by Weathering." The former was conducted last fall and the latter this spring. Farmers concerned were advised as to the quality of the seed.

THE ENTOMOLOGICAL BRANCH

The officers of the branch employed at headquarters, in the field or at the plant inspection stations have had a very active year. In November, 1927, an important conference of the officers of the branch in charge of divisions, laboratories, plant inspection stations, and special projects, was held at Ottawa. As it had been five years since the holding of a similar conference, the whole work of the branch since 1922 was discussed at length, and much information of value recorded. The following is an account of the work of the branch during the fiscal year ended March 31, 1928.

Division of Field Crop and Garden Insects

During 1927, throughout Canada as a whole, field and garden crops were remarkably free from severe losses due to insects, owing chiefly to weather conditions. The wet weather in the early season tended both to reduce the actual numbers of insects and to stimulate regrowth and recovery of the crops attacked. As a consequence, most of the officers of the division were able to apply themselves directly to definite insect problems, a small proportion of their time only being taken up in organizing and directing emergency control campaigns.

Correspondence at the field laboratories in respect to insect advice has increased during the year. The requests for information in advance of insect outbreaks in the field are increasing and indicate further recognition of the value of control practices. The closest co-operation with provincial Departments of Agriculture was continued.

Though crops were comparatively free from outstanding losses, certain insect conditions were of particular interest and importance, of which may be mentioned: (1) the further spread of the European corn borer in Ontario and Quebec and the enormous decrease of corn acreage in the counties of Essex and Kent, Ontario, following the losses lately suffered and the marked reduction in numbers of borers following the control campaign of 1926-27 in Essex, Kent, Elgin and Oxford counties in Ontario; (2) the discovery in Canada (Ontario) of the Mexican bean bettle; (3) the practical disappearance of the grasshopper outbreaks in British Columbia; (4) the destructive outbreak of the bertha cutworm in Alberta and Saskatchewan; (5) the continued destructive outbreak of the army cutworm in Alberta, and (6) the continuing losses due to wheat-stem sawfly in Alberta and wireworms in Saskatchewan.

The European corn borer, from scouting carried on by the Division of Foreign Pests Suppression, is now known to be present over a greatly increased territory, having been found as far west as Sault Ste. Marie, as far north as New Liskeard, and, extending east, to the village of Batiscan within 25 miles of Quebec City. The depressing effect of this insect upon corn culture has been shown clearly between the years 1924 and 1927 when the area seeded to corn in Essex county (Ontario) shrank from 85,179 to 20,000 acres and in Kent county (Ontario) where during the same period the acreage shrank from 75,000 to 7,000 acres. The results of the control campaign for 1927, carried on in eight counties by the Ontario Department of Agriculture, have shown a marked reduction of the pest in the most severely infested districts. This reduction justifies the confidence felt by the department in the possibility of control of the pest if the recommendations are followed by corn growers.

The Mexican bean beetle was discovered to be present in small numbers for the first time at five points in the counties bordering lake Erie in Ontario during the summer of 1927, by officers of the Division of Foreign Pests Suppression. This pest, if it can thrive under Canadian conditions, will be an insect of the very greatest importance to the bean growers of Ontario (value of crop 1925, ($2,431,446). Its history in the United States during the last few years has shown it to be capable of destroying bean crops in areas where it can thrive. Furthermore, its presence necessitates the growing of beans under a most burdensome protective spray program.

Grasshoppers which have been in continuous outbreak in the dry interior of British Columbia for the past seven years, and in the Peace River district for five years, practically disappeared during 1927. The outbreak in the Peace River district, for which elaborate control preparations had been made in co-operation with the province of British Columbia, was wiped out in the early part of the season by torrential rains. Another outbreak of some years standing in the Chilcotin Range country which in mid-summer promised to be of unexampled severity was completely controlled by a fungous disease.

An outbreak of the bertha cutworm throughout Saskatchewan and Alberta was one of the most spectacular insect attacks of the year. The insect has never before occurred in widespread outbreak form. It has been under study for several years and it was noted to be steadily increasing. The losses, therefore, in 1927, to sweet clover, alfalfa, flax and garden vegetables, had been expected. A great deal has been made known regarding the life-history, habits and control of the insect. Now that it is recognized by the farmers as of importance, its occurrence in the crop in the early season will be the signal for the adoption of prompt control practices.

The army cutworm was again abundant and distributed over a wider area than in 1926. It caused severe losses to grain at many points throughout southern Alberta, though the recovery due to the rains reduced the losses greatly. A decrease in the outbreak is confidently looked for in 1928. With the knowledge of the insect now available, it is possible to forecast outbreaks at the beginning of the season and then, by warning the growers of impending trouble and informing them of the control measures which have been worked out, to reduce the losses to little importance wherever it is felt that the losses justify the effort.

The wheat-stem sawfly has continued to spread in Alberta though the infestation and losses were less intense both in this province and in Saskatchewan (loss estimated $4,565,000) than in 1926, due to the weather conditions which seemed to reduce the full effect of the attack. The insect is a pest of the first magnitude, however, and every effort is being made to improve the control methods in use particularly in the heavy soil areas. Most gratifying progress was made during the year in the study of trap crops, and also in estimating the value of natural parasites.

Wireworms, particularly in the prairies, continue to rank as most important destructive insects, especially in large areas of Saskatchewan (loss estimated at $4,145,000) and Alberta. Acreages of grain delayed in ripening by the necessity of reseeding were exposed to unnecessary losses from rust and frost making an extremely heavy indirect loss. The whole problem and its control is being carefully studied with most encouraging progress.

Many other insects injurious to field and garden crops were studied and dealt with during the year. The potato beetle control campaign carried out in co-operation with the province of British Columbia was most successful. It is hoped that the beetle will be confined to its present territory.

The officers at the various field crop laboratories have given much attention to definite investigational work, and in this connection important progress can be reported. The insects studied include cutworms of several kinds throughout the Dominion, onion maggot, white grubs, carrot rust fly, army worms, potato stem-borer, slugs, tarnished plant bug, columbine borer, sweet clover leaf-miner, beet webworm, and plant bugs attacking alfalfa. Among broader and more fundamental problems, particular study is being given to the relation of prairie crop rotation to insect abundance, insects as factors in alfalfa seed production and the discovery and value of insect attractants and repellents.

Division of Forest Insects

The investigation of the spruce budworm outbreak in Cape Breton Island was continued during the summer of 1927. An interesting feature of this outbreak is the great increase in parasitism which reached, over the whole infested area, a degree of approximately 80 per cent. An interesting experiment in airplane dusting was carried out in connection with this infestation in order to determine the value of this method of control in dealing with defoliating forest insects. The work was carried out through co-operation between the Entomological Branch of this department and the Canadian Air Service. The latter service provided a special dusting aircraft with personnel and equipment. This department provided the insecticide and planned and supervised the experiment, in co-operation with the Nova Scotia Forest Branch, which also provided a large amount of insecticide for a continuation of the experiment on a budworm outbreak in Antigonish county. The results sought in this initial experiment were to solve the mechanical difficulties entailed in placing dust accurately and in different degrees of concentration on the areas selected and, through applying different doses of poison on different plots, to study the effect of the poison in killing the caterpillars. Many difficulties incident to developing a new method,

such as this, were eventually surmounted and the dust was applied in varying doses to the selected plots with a fair degree of exactness. The work was successful in that the officers engaged upon it learned how to conduct an experiment of this kind, in itself a long step in advance, and valuable information was obtained respecting the effect of different doses of the poison on the caterpillars under different forest conditions. The effect of the different doses, however, was not sufficiently great to enable us to make definite conclusions. With the experience obtained in this experiment it should be possible to proceed with the investigation and establish definitely the value of airplane dusting for the control of budworm outbreaks, as well as for other outbreaks of defoliating forest insects, with the hope of perfecting this method for practical use in our forests.

Our investigations were continued in 1927 on the budworm outbreak in the Welcome Lake district of Ontario. This outbreak has increased in severity during the last two years and appears now to be spreading rather extensively in the country west of Sudbury. A considerable amount of balsam fir has been killed and several stands of white spruce have been injured very severely. The small budworm outbreak in northern Manitoba was again examined by our officers. In the parts of this country reached by them, this outbreak has almost disappeared.

The study of the spruce bark-beetle outbreak at Frater on the eastern shore of lake Superior was completed in 1927. Valuable information has been obtained on the habits and destructiveness of this insect and particularly on the factors which influence the development and natural control of infestations.

Control operations for the bark-beetles affecting yellow pine in southern British Columbia have been brought to a successful conclusion. Only a small amount of control work was required in 1927 and it is anticipated that in the future very little work will be required in inspecting the forests to prevent the development of new infestations. Our control work for beetles affecting lodgepole pine was continued with successful results. Our forest insect work in British Columbia is conducted in co-operation with the Dominion and provincial Forest Services. During the past two years our officers have visited the stations of the Forest Service and instructed the forest officers in the determination of forest insect injuries in their district, with a view to obtaining early and accurate reports on insect outbreaks in their initial stages so that control measures may be instituted effectively before extensive injury has been caused. It is planned to extend this method of co-operation both in the western and eastern forests so that an effective, intelligent system may eventually be developed, whereby all the organizations and interests concerned with the protection of our forests will co-operate in the endeavour to prevent great insect injuries.

Our investigation of the cedar borer in British Columbia was continued in 1927. The heavily infested areas have been delimited and this information has been distributed among the lumbermen, so that the most seriously affected sections of the forest could be avoided until the infested timber could be utilized. During recent years the borer-infested timber has been discarded as supposedly unfit for use. It was believed, however, by many that the borer injury did not weaken the trees very seriously for use as poles for telegraph and telephone lines and for similar purposes. Accordingly, in co-operation with the Forest Products Laboratory of the Department of the Interior at Vancouver, our officers selected a series of cedar poles exhibiting different degrees of borer injury. These, together with sound cedar poles to serve as checks, were subjected to strength tests at the Forest Products Laboratory, and it was proven that the vast majority of the infested poles are not seriously weakened by the tunnels of the borer. It is hoped, therefore, that this investigation will result in providing a market for a very large amount of timber that would otherwise be wasted.

The larch sawfly, which has proved such a destructive enemy to the larch or tamarack forests of eastern Canada in the past, has been the subject of continued investigation by our officers. The European parasites of the larch sawfly, which were introduced into Manitoba by the Entomological Branch some years ago and have become established there, have apparently succeeded in controlling the larch sawfly outbreak over considerable areas. An attempt was made in 1927 to distribute these useful parasites to several infested larch areas in eastern Canada and it is planned to continue this distribution as vigorously as possible. It is hoped thereby to establish new colonies of the parasites in several important larch areas both in Eastern and Western Canada and from these stations again to distribute the parasites to new territory until eventually they will be present throughout all our infested larch forests. The introduction and distribution of these parasites appears to offer definite hope of a permanent control of this injurious pest.

The investigation of injuries to fire-killed trees and logs caused by wood borers has been continued by our officers. Several new methods of control have been tested and improved methods have been devised. Very promising results were obtained by distributing lime sulphur dust over the piles of logs which were left in the woods exposed to attack by the beetles. This gives promise of being an effective and cheap method of control and will be tested more extensively in 1928.

The imported beech bark louse, which was introduced into Nova Scotia from Europe some years ago, has been under investigation by our officers for several years. It is found to be very widely distributed throughout the mainland of the province of Nova Scotia and an infestation was found last summer in the central part of Cape Breton Island. A careful survey of the southern part of New Brunswick by our officers disclosed two infestations by this insect on the New Brunswick side of the Nova Scotia boundary. A more careful and extensive survey is planned for the coming season and it is hoped that some way may be found to prevent the further distribution of this most destructive species.

Shade tree insect investigations in the Prairie Provinces have been conducted from the Laboratory at Indian Head, Sask. An officer in charge of forest and shade tree investigations has been stationed permanently at this laboratory. Thorough investigations of the insects affecting the prairie shade trees will be conducted and every effort made to advise the farmers in preventing insect injuries to their trees.

Insects affecting shade trees in Eastern Canada were investigated from the laboratories at Ottawa, Ont., and Fredericton, N.B. Insects affecting the sugar maple again received special attention, particularly the maple leaf cutter in the maple groves of Ontario and Quebec. Various insects affecting shade trees of cities and towns have been investigated.

The survey of the distribution of the European pine shoot moth, which has been introduced into many parts of Canada on imported pines, has been continued, and every effort will be made to reduce the present infestation and to prevent the further distribution of this important pest.

Important studies on the biologies of forest insects have been continued by our officers at Whycocomagh, N.S.; Fredericton, N.B.; Ottawa, Ont.; Welcome Lake, Ont.; Frater, Ont.; Indian Head, Sask.; Vernon, B.C.; and Pender Harbour, B.C.

Studies in the taxonomy and morphology of important forest insect groups are being conducted in the winter months by certain of our officers.

Division of Foreign Pests Suppression

In all the various fields of activity of the officers of this division, namely, the administration under the regulations of the Destructive Insect and Pest Act of the permit system, the inspection of imported plants and plant products, the maintenance of foreign and domestic quarantines, the inspection and certification of plants and plant products for export, the application of methods of control of imported insect pests and the scouting of territory for possible new infestations, the amount of work accomplished materially exceeded that of previous years.

During the year ending March 31, 1927, 34,624,880 plants were examined, either at port of importation or at destination, an increase of some four million plants over the preceding year. The value of the nursery stock imported is given as $1,192,773 in the report of the Department of Trade and Commerce.

The number of permits issued was 13,729, United States and foreign, being within one of the figure for the preceding year; the number of inspections in 1927 of imported nursery stock totalled 5,960, an increase of 405 over 1926.

Importations by mail amounted to 2,473 packages, with 1,877 inspections, being another increase in total volume.

Among the 2,414 passenger vessels visited by the inspectors at Saint John, Quebec, Montreal, and Vancouver, 215 passengers, on 170 boats, were found to have plants in their baggage. Prohibited or diseased plants were thus intercepted in 72 cases.

Inspection of plant products could only be carried on as other work permitted. However, 5,858 such inspections were made, an increase of 166 over the preceding year.

The number of inspections made in 1927-28, in all the projects of the division, amounted to 12,559 as compared with 12,729 in the year 1926-27. The difference is due to the modification of the United States regulation formerly requiring the inspection of certain fruit, vegetables, cut flowers, etc., exported from Ontario to the United States.

During the year, 590 interceptions of insect pests and plant diseases on importations of nursery stock and plant products were made. This is an increase of 109 per cent over the former year.

The interceptions made included brown-tail moth, European earwig, European pine shoot moth, scales of different kinds, root borers, mites, bulb flies, and various rots and diseases of bulbs, corn ear worm, grain insects in corn, etc.

The Division of Botany of the Experimental Farms Branch co-operated to the fullest extent in the identification of plant diseases intercepted by the inspection service.

During the year ending March 31, 1927, plants were refused entry in 73 cases, owing to their importation being contrary to regulation. Thirty-one shipments of potatoes were also prohibited entry for the same reason.

Twelve special importations of plants, otherwise prohibited entry, to be used for scientific purposes, were authorized.

Exports of plants and plant products to foreign countries totalled 482, an increase of 156 over the preceding year. The shipments were made to nineteen different countries, and comprised 306,784 plants, 8,216 bulbs, 15,028 pounds of forest tree seeds, and 1,500 pounds of onion sets.

The Brown-tail Moth.—At the close of the fiscal year, March 31, 1928, scouting for this insect in Nova Scotia was completed and it is gratifying to record that no winter webs have been found. It is, therefore, hoped, that the infestation has been eradicated.

The Apple-Sucker.—Scouting operations in 1927, covering the period June 7-28, discovered a rather heavier infestation in Cumberland county, N.S., and

a slight spread in Westmoreland county, N.B. No new infestations were found in the latter province.

Scouting in Prince Edward Island showed that the apple sucker is present over the central and southern portion of the Island. This constitutes the first record of its presence in this province.

A total of 112 certificates, covering 14,392 plants of a value of $4,300, was issued during the 1927 shipping season. These certificates, issued under Regulation No. 1 (Domestic) 2nd Revision, covered shipments of nursery stock, other than host plants of the apple sucker, from points inside to points outside the areas quarantined for that insect.

The Gypsy Moth.—Although no evidence of the presence of any living stage of the gypsy moth in the area covered by the Henrysburg, P.Q., outbreak and adjoining territory had been discovered in 1926, field work was continued in 1927 along the lines of re-examination and eradication. The area infested was again carefully gone over, and all the trees therein and for a distance of 1,000 feet outside, were banded with raupenleim and burlap. Spraying commenced on June 13 and finished on June 24. The area known to have been infested was covered and from 1,000 to 3,000 feet beyond. The United States Bureau of Entomology again co-operated by the loan of a power sprayer and three operators.

No living stages of the gypsy moth were found in 1927 nor were any old egg clusters observed in the area previously infested and the territory adjacent thereto. Further scouting operations in new localities failed to reveal any evidence of the gypsy moth.

Although the presence of the gypsy moth in New Brunswick or Nova Scotia was not suspected, it was thought well to do some scouting in certain localities in those provinces, where conditions might be regarded as favouring an outbreak. However, as the result of a month's scouting no evidence of this pest was observed.

In connection with the enforcement of the gypsy moth quarantine, inspection of shipments of Christmas trees was conducted from November 2 until December 11. One hundred and twenty-five certificates were issued, covering 66,980 bundles of trees, valued at $33,487.50. These figures show an increase of some 69 per cent over the preceding year.

The European Corn Borer.—The organization of this work was the same as in former years, namely, the scouting of areas bordering already infested territory, the enforcement of quarantine regulations, the taking of records of the development of the pest in early-infested areas, and the carrying on of corn borer parasite studies and breeding work.

In the scouting work in the provinces of Ontario and Quebec, fifty-nine collections were made in districts not previously found infested.

As a precautionary measure, some scouting was done in the provinces of Nova Scotia and New Brunswick, but no trace of the borer was found.

The maintenance of quarantine regulations, as revised in the spring of 1927, to cover the additional areas found infested in 1926, was conducted by means of distribution of the revised regulation and by visits to wholesale houses, shipping points, etc. Automobile inspection, however, was not carried on owing to the fact that those parts of Ontario where motor traffic is a factor were under quarantine.

An important addition to the restrictions in 1927 was the inclusion of shelled corn in the products affected. Under the revised regulation, inspection and certification are required. A system for carrying this out was evolved and has, so far, operated satisfactorily to all concerned.

The result of the degree of infestation record work may be summarized by stating that the work shows, in a great part of the territory, as yet lightly infested, that the corn borer threatens to increase to a point where it will become of economic importance.

The Oriental Peach Moth.—Working in co-operation with officers of the Vineland Entomological Laboratory, the inspection staff at Niagara Falls continued scouting and infestation record work organized in 1926. In all, 357 orchards of 1,936 acres total area, were examined in 1927, and of these 120 orchards were found to be infested. These are located at various points in the counties of Welland, Lincoln, Wentworth, Kent, and Essex. In general, the work recorded a spread of the insect and also an increase in the intensity of the infestations.

The European Pine Shoot Moth.—Scouting for this insect was continued in 1927 under the supervision of the district inspectors at Chatham, Niagara Falls and Toronto. These officers report a general decrease in severity of infestation and the failure to find the insect at a number of points where it was found in 1926. It would seem that systematic scouting for a few more seasons, accompanied by careful treatment of infested trees, together with rigid inspection of imported pines, is likely to control, and possibly to eliminate, this serious pest.

The Mexican Bean Beetle.—In 1925, this insect, in its progress northward, had invaded the south shore of lake Erie. Scouting in southwestern Ontario, carried on each season since the above year, did not reveal its presence until 1927, when the Mexican bean beetle was found about 12 miles south of Chatham. Further scouting discovered the beetle along the lake shore of Essex, Kent and Elgin counties and also some distance inland. In the Toronto district the first collection was made near Lambton Mills, and later one at Oakville and two near Burlington.

Division of Systematic Entomology

The main activities of the above division during 1927 have been along the lines laid down in previous reports, viz:—

1. Maintenance and extension of the Canadian National Collection with taxonomic studies based on the material in the collections.
2. Identification work for field officers, provincial and other museums, universities and colleges, and private individuals.
3. The upkeep of the Branch Library.

Taxonomic work has been continued by the officers of the division, especially in Diptera, Coleoptera, Lepidoptera and Ephemeroptera, and numerous articles have been published in scientific journals, incorporating the results of the investigations; due to these studies and to exchanges with other workers and institutions about 350 types of new species have been added to the Canadian National Collection and numerous new records of insects, hitherto unknown to our Canadian fauna, obtained.

Insect faunal surveys were carried on in the Kazubazua region of Quebec, also in the southwest portion of the same province extending from Covey Hill to Knowlton. A survey of the Point Pelee, Ontario, region during June and the early part of July, was also made. Very interesting results were obtained from these surveys and numerous valuable specimens added to the Canadian National Collection.

Identification work for field officers, museums and private individuals has been continued. With the appointment of a specialist to take charge of the Coleoptera, considerable impetus has been given to the work with this order of

insect, and not only has the identification work increased, but valuable connections with various workers all over the country have been established, resulting in numerous additions to the National Collection in this order. An entire rearrangement of the Coleoptera is being undertaken on a much sounder and more modern basis of classification than has been possible heretofore.

A number of older and very valuable books have been added to the Branch Library, which is fast becoming one of the recognized entomological libraries on the continent. The card catalogue of new species of North American insects is being continued and is proving of considerable value to the divisional officers as they work over, from time to time, various groups of insects.

The Destructive Insect and Pest Act Advisory Board

With a view to preventing the importation, or limiting the spread within Canada, of dangerous insect pests and plant diseases, the Advisory Board, during the year, recommended certain changes in the regulations under the Destructive Insect and Pest Act. The following changes were approved by Order in Council.

Regulation No. 3 (Foreign) 3rd Revision. P.C. 559.

Prohibiting the importation of potatoes from certain foreign countries or districts thereof.

This regulation was amended by the removal of the prohibition against importation of potatoes from those districts in the states of Pennsylvania, West Virginia and Maryland, outside any area quarantined for the potato wart disease; a certificate as to locality where grown must accompany each shipment.

Regulation No. 4 (Foreign) 1st Revision. P.C. 17.

Prohibiting the importation of all plants except the fruits of pineapple, banana and cocoanut into the Dominion of Canada from the Hawaiian Islands.

This regulation was amended by the addition of the cocoanut to those fruits which may be imported from the Hawaiian Islands.

Regulation No. 8 (Foreign) 2nd Revision. P.C. 717.

Prohibiting the importation of certain varieties of currants and gooseberries into the Dominion of Canada from all countries.

This regulation was amended by permitting the importation of the standard commercial varieties of gooseberries and of red or white currants, cultivated for their edible fruits only.

Regulation No. 10 (Foreign) 4th Revision. P.C. 559.

Restricting the importation of corn and certain other plants into the Dominion of Canada from certain states of the United States of America.

This regulation was revised (1) by requiring a certificate of inspection for all shelled corn forwarded to Canada from all infested areas in the United States, and (2) by applying the quarantine to states rather than to infested counties in those states, as had been done heretofore.

Regulation No. 11 (Foreign) 3rd Revision. P.C. 559.

Prohibiting the importation of alfalfa hay into the Dominion of Canada from certain states of the United States of America.

This regulation was amended by substituting therein entire states instead of certain counties of those states.

Regulation No. 14 (Foreign) 2nd Revision. P.C. 717.

Prohibiting the importation into the Dominion of Canada of all fresh peaches and peach nursery stock from certain states of the United States of America.

This regulation was amended, effective on and after April 20, 1927, by permitting the importation of fresh peaches and peach nursery stock into Canada from certain states of the United States of America from which such importations had formerly been excluded.

Regulation No. 14 (Foreign) 3rd Revision. P.C. 1526.

Effective on and after August 11, 1927; this regulation was amended by limiting the prohibition against the importation of fresh peaches, peach nursery stock, etc., to the provinces of Ontario and British Columbia.

Regulation No. 2 (Domestic) 6th Revision. P.C. 559.

Restricting the movement of corn and corn products from certain areas in the provinces of Ontario and Quebec on account of the European corn borer.

This regulation was revised by including in the area under quarantine the new territory in Ontario and in Quebec into which the corn borer was found to have spread, as well as certain other adjacent districts.

Regulation No. 3 (Domestic) 1st Revision. P.C. 717.

Prohibiting the importation of certain species of pine into the provinces of Alberta and British Columbia.

This regulation was amended by removing therefrom the restriction on the movement into Alberta and British Columbia of standard commercial varieties of gooseberries and of red or white currants, cultivated for their edible fruits only.

Regulation No. 8 (Domestic). P.C. 717.

Restricting the sale of all species and varieties of black currants in Canada.

This regulation made it illegal to sell or otherwise dispose of all species of black currants in the Dominion of Canada, with the exception of the three prairie provinces and certain counties in the province of Ontario.

On February 16, under P.C. 260, the above regulation was rescinded.

Fruit Insect Investigations

In 1927, there was a marked increase of the oriental peach moth in Ontario, not only in intensity of infestation, but also in spread. The insect is present in severe outbreak form in the vicinity of St. Davids, Ont., and has already caused infestations running over sixty per cent. Our officers are making an intensive study of the pest and are developing new lines of control measures which we hope will be of value.

The apple sucker has continued to be under observation in the provinces of Nova Scotia and New Brunswick. During the year, infestations for the first time were found on Prince Edward Island.

In British Columbia, investigations conducted in the southern Okanagan fruit area, have shown that the tarnished plant bug is responsible for an important injury to peaches, known locally as "cat facing."

In the Cranbrook area in southeastern British Columbia and in the Okanagan valley, caterpillars of small tortricid moths known as leaf-rollers, were responsible for important injury to the foliage of strawberry plants. Much information on the life-history and habits of these insects was obtained which will be useful in future outbreaks.

The European red mite appeared in outbreak form in the Niagara district, Ont., quite late in the season. Satisfactory results in controlling it were secured from the use of home-made oil sprays.

In sections of Ontario, Quebec and the Maritime Provinces, apples are frequently attacked by the apple maggot. During 1927, in unsprayed orchards, this insect caused much damage to the crop. It may be effectively controlled by the timely application of arsenical sprays.

Further studies on the life-history and control of the round-headed apple tree borer, have been conducted in southern Quebec. Control tests with calcium cyanide mixtures have given promising results, particularly when this poison was used in combination with castor oil.

In the Niagara district, Ontario, in unsprayed orchards, and orchards sprayed too late, there was a very heavy infestation of pear psylla. The outbreak was a serious one, many orchards being badly affected. The officer in charge of our Vineland laboratory has demonstrated the value of a lubricating oil emulsion for the control of this insect and in orchards properly treated very excellent crops of pears have been secured.

During 1927, unusually severe damage by the green apple aphis was experienced in most of the fruit-growing sections throughout the Dominion. Good control, particularly in Ontario, was secured by dusting or spraying with nicotine sulphate.

Other fruit insects present in destructive numbers during the year and which required the attention of our officers were: budmoths, codling moth, casebearers, strawberry root weevil, etc.

Insecticide Investigations

As in recent years, an officer of the Division of Chemistry, Dominion Experimental Farms Branch, has been stationed at the Annapolis Royal laboratory during the summer months in order to assist in co-operative investigations on which chemical work is particularly necessary.

Further work with nicotine has corroborated results obtained previously, and has fully established the high value of this material against the eye-spotted budmoth. In addition to a direct insecticidal effect by contact, it has been established that there is a distinct residual effect lasting for a long period which is of value against the budmoth, and from which an inference may be made against certain other pests also.

The use of nicotine as a dust in conjunction with a fungicide has been further gone into in small detail and it has been established during 1927 that mixtures of copper carbonate, hydrated lime, and nicotine, are effective both from a fungicidal and insecticidal standpoint.

Probably the most important project which has been dealt with, is the development of a more satisfactory combined insecticide and fungicide spray for fruit trees than the standard materials at present in use. Work on this has been under way for several years and undoubtedly will continue for several years in the future. This has involved extensive laboratory work both chemical, in co-operation with the Chemical Division, and biological, in co-operation with the Division of Botany. Several hundred field plots were devoted to this project in 1927, which have been productive of interesting and promising results. From our extensive records to date it would appear that the mixture of lime-sulphur, aluminium sulphate, and calcium arsenate (with or without nicotine), is a combination which is definitely superior, considering the many factors involved, to the standard materials now in use. However, this mixture, while constituting an important advance, is not considered by any means perfect. Investigations are, therefore, continuing with the hope of further improvement.

Co-operating with a local hardwood mill, a considerable amount of time was spent on the insecticidal treatment of hardwoods destined for trade in the tropics, with particular reference to the West Indies. It has previously been impossible to market Maritime hardwoods in the West Indies due to their susceptibility to the ravages of termites. A cheap and economical process was finally devised for insect-proofing hardwoods of the varieties birch and maple. Success was not attained with the variety beech.

Mosquito Investigations

During 1927 there was a marked increase in public interest in mosquito control work throughout the Dominion. In British Columbia, our officer at Agassiz carried out aerial and ground surveys of extensive breeding areas in the neighbourhood of Harrison Hot Springs and assisted, in an advisory capacity, in a successful local control project.

In Saskatchewan, our officer at Indian Head continued faunal and biological studies of mosquito species in the Prairie Provinces and secured much valuable data. He also made a general survey of the mosquito situation at Winnipeg, Man., and materially helped the local mosquito control committee in planning and carrying out effective control measures.

In Eastern Canada, at Ottawa, an extensive control campaign, financed by local municipalities and other bodies, was launched with considerable success. This campaign, which was conducted by a local committee working under the direction of Branch officers, served as a nation-wide demonstration of the feasibility of controlling these pests. Faunal and biological studies were also continued, and with the co-operation of the Division of Chemistry, Central Experimental Farm, a number of chemicals in liquid and dust form were tested out with promising results. An investigation of a mosquito outbreak in midsummer at Hawkesbury, Ont., revealed enormous numbers of an exotic species, which has become established at a number of other points in Eastern Canada, developing in extensive back channels of the Ottawa river heavily polluted with sulphite pulp waste from a local pulp mill. Taxonomic studies of specimens collected in various parts of Eastern Canada were made at Ottawa, resulting in an increased knowledge of our fauna.

Household Insects

Studies in the life-histories, habits and control of several important species of insects infesting dwellings was continued at Ottawa, and, to a lesser extent, in certain of our field laboratories, during 1927. The results from these studies have assisted materially in enabling us to give prompt and satisfactory replies to the numerous requests for information concerning these pests which are frequently received. With the co-operation of the Division of Chemistry, Central Experimental Farm, a large number of fly-sprays were prepared and tested out at Ottawa during the summer. As a result of this work, a very cheap, easily prepared and effective fly-spray, the active principle of which is pyrethrum, is now available for the use of the general public.

Natural Control Investigations

The European corn borer parasite work in Ontario was extended during 1927. In addition to the small parasite, *Habrobracon brevicornis*, 203,400 individuals of which were liberated during the season, as well as the larger species, *Exeristes roborator*, 40,580 specimens of which were liberated, other species of parasites were received from the United States Corn Borer Laboratory at Arlington, Mass. These, with subsequent liberations, were as follows: *Microgaster tibialis*, 13,920 individuals; *Eulimeria crassifemur*, 3,911 individuals; *Apanteles* sp., 1,931 individuals; and *Marcocentrus* sp., 1,049 individuals.

During the winter of 1927-28, preparations were made for the breeding of the native egg parasite, *Trichogramma*. Large numbers of the eggs of the Angoumois grain moth and the Mediterranean flour moth are being obtained as hosts for *Trichogramma*. Satisfactory progress is being made in this new line of work.

In 1926, at the request of the New Zealand Government, collections of living specimens of white grubs parasitized by the tachinid fly, *Microthalma michiganensis*, were despatched to that country. In 1927, a further large shipment of parasitized grubs were sent to New Zealand, the hope being that the parasite would become established and attack certain kinds of destructive chafers. Further specimens of chrysopid flies were also forwarded to New Zealand to see if they would become established and assist in reducing important outbreaks of an aphid.

An effort to transfer the larch sawfly parasite, *Mesolieus tenthridinis*, from Manitoba to Ontario was made in 1927. This parasite has increased considerably in Manitoba and it is hoped to establish it in sections of Eastern Canada where the sawfly is again becoming destructive.

In 1926, the Entomological Branch received a small supply of parasites from the state of Washington for liberation in the Okanagan Valley, B.C. During 1927, the rearing of these parasites was continued in British Columbia and liberations made in codling moth-infested areas.

Insects Affecting Stored Products

During 1927, the main problem undertaken has been in connection with the control of insect pests in flour mills. Certain flour mills in Ontario, infested with the Mediterranean flour moth, were fumigated successfully with calcium cyanide, 100 per cent kill in some experiments being effected. During the year many inquiries concerning the control of stored product insects were received. Copies of papers dealing with pests were forwarded to all the leading mills through the Canadian National Millers' Association.

Indian Orchard Work

During 1927, the Dominion Entomologist continued to direct the work of the Supervisor of Indian Orchards in British Columbia. The Indian reserves of the province are visited periodically by the officer employed for this work and advice given on the spraying of orchard trees, etc. The grant under which this work is maintained is provided by the Department of Indian Affairs.

Advisory Board on Wild Life Protection

During the year, the Dominion Entomologist, representing the Department of Agriculture, attended the meetings of the Board. In 1927, a Dominion conference of game officials and others interested in the conservation of our wild life was held at Ottawa. Other departments represented on the board are Indian Affairs, Mines, Interior, Fisheries, and Mounted Police.

Advisory Board under the Agricultural Pests Control Act, 1927

Under authority, provided in section 11 of the Act, the Dominion Entomologist was appointed a member of the advisory board. This Act regulates the sale and inspection of agricultural economic poisons, and is not intended to provide measures for the control of the various kinds of pests which affect agriculture.

Inter-departmental Committee on Air Operations

Arrangements have been made whereby the Dominion Air Service will co-operate with this department in continuing the experiment in airplane dusting for the control of spruce budworm outbreaks commenced last summer with promising results in Cape Breton Island. It is planned to have this work

carried out in the summer of 1928 in the budworm-infested forest west of Sudbury in Ontario, and it is hoped that definite progress will be made in perfecting this method of control for the prevention of insect losses in our forests.

Exhibitions

The exhibition work of the Entomological Branch was considerably extended during 1927; the number of exhibitions increased and the high standard set in former years was well maintained. The response of the public to the development of this phase of our work has been very gratifying and encouraging, and it augurs well for future expansion. Many inquiries have been received from farmers, fruit-growers, gardeners, and others, and much useful information distributed in this way.

Besides the annual assemblies made at the larger and more important centres, such as the Canadian National Exhibition at Toronto and the Central Canada Exhibition at Ottawa, prominent displays have been made at London, Ont.; Montreal, P.Q.; Quebec, P.Q.; Sherbrooke, P.Q.; as well as at a number of the smaller fairs in the various provinces of both eastern and western Canada.

There were also the following special exhibitions assembled during the year: (1) Under the auspices of the Minister of the Department of Mines and in co-operation with other branches of the government service, at a conversazione of the Professional Institute of the Civil Service of Canada, at the National Museum of Canada, Ottawa, in March; (2) At the special request of the Minister of the Department of Mines, for the World's Mining Conference, at the National Museum of Canada in August; (3) In commemoration of the jubilee of agriculture in Canada, at the Royal Winter Fair, Toronto, in November. All these functions were well attended and our exhibits most favourably commented on.

The various phases of entomological work were presented in the form of mounted photographs, coloured life-history illustrations, wax models, specimens of injured wood, bark, fruit and vegetables; and by means of a mechanical device, attractive posters setting forth spraying formulae, warning notices and other useful information, were attractively displayed. Prominence was given to such important pests as the European corn borer, oriental peach moth, Mexican bean beetle, apple maggot, Japanese beetle, etc. Insects, such as warble and bot flies, affecting horses and cattle were made a special feature and emphasis placed on the control of houseflies, mosquitoes, and other household pests. Officers of the branch were in attendance to explain the exhibits and give advice regarding matters of control.

In response to repeated inquiries on the subject of public display of exhibition material, a circular, entitled "Some Suggestions for Preparing and Erecting an Entomological Exhibit," was issued in mimeographed form. This included practical suggestions, reminders and useful hints regarding the assembling, construction, erection, and conducting of an entomological exhibit, the main purpose of the publication being to assist as much as possible those who are engaged in this kind of work.

National Museum of Canada

The Dominion Entomologist, as Honorary Curator of Entomology in the National Museum of Canada, is assisting in the establishment of an educational display of insects and their work at the museum. During the year, a temporary exhibit was installed. This has attracted a good deal of attention and has served to advertise the work of the branch.

Meetings

Many important meetings have been attended by officers of the branch during the year.

The Dominion Entomologist attended international conferences at Nashville, Tenn.; Detroit, Mich., Atlantic City, N.J., and other places. The Associate Dominion Entomologist attended the International Zoological Congress in Budapest, Hungary, in September, 1927, and visited several important entomological laboratories in Europe for conferences with their officers, making brief investigations of their principal forest insect problems. He also attended the Imperial Agricultural Research Conference in London during the month of October.

At the annual meeting of the Association of Economic Entomologists held in Nashville, Tenn., the Chief of the Division of Foreign Pests Suppression was elected Chairman of the Section of Plant Quarantine and Inspection for 1928.

Field Laboratories

ANNAPOLIS ROYAL, N.S.

The officers of this laboratory are generally concerned with investigations of insecticides, but during 1927, more attention than usual has, of necessity, been given to a direct study of certain pests which have been particularly prominent. This includes a detailed biological study of certain species of budmoths and leaf-rollers which has resulted in the obtaining of much useful information. Coincidently with this, detailed work has been under way with regard to control measures. This has been done particularly with the eye-spotted budmoth, which has been present in tremendous numbers during recent years. In the report of last year it was stated that promising results had been obtained against this insect, and the extensive work of 1927 fully corroborates the records obtained previously, and has resulted in a mass of information from which definite and effective control measures may be recommended. Similarly, experimental control measures have been commenced against the other species of budmoths and leaf-rollers, and in some cases promising results appear to be in sight. Work on new control measures against the apple maggot was also continued, with results, while not as promising as would be desired, yet sufficiently so to report definite progress.

Spray and dust calendars were published, many lectures were given during the year, and detailed exhibits displayed at the more important local fairs.

FREDERICTON, N.B.

Research in the biology of and methods for controlling forest and shade tree insects, as also field crop, garden, fruit and greenhouse insects, have been undertaken during the year.

A total of nineteen different forest insects were under study during 1927, fourteen of these being wood or bark-destroying beetles, a foliage-destroying sawfly, two foliage-destroying caterpillars, the spruce gall *Chermes* and the felted beech coccus. The bark-beetle studies resulted in the finding of several important factors connected with the number of generations per year and their methods of hibernation. Previously unknown species of *Chermes* have been found and new host relationships for this insect discovered. The felted beech coccus was found to have become established in Albert and Westmoreland counties in New Brunswick, districts separated from the great central forest area of the province by only a narrow band of farm land. Special studies on the biology of this imported wingless and legless insect resulted in finding the method of spread

from tree to tree. Control methods applicable to shade and park trees were also found.

Experiments connected with field crop insects resulted in finding methods for greatly reducing the injury by the carrot rust fly larvae, a possible method for preventing injury to bean seedlings by the seed-corn maggot and an inexpensive method of destroying slugs. Progress was made in finding the life-history of the European potato stem borer, this including the discovery of two wild host plants. The hessian fly survey was continued, with the discovery of the insect in districts not previously known to be infested, but generally less abundant in all districts than in 1926. Control experiments were carried on against the turnip flea-beetle and other seasonal insects of the year, and a life-history study of the commonly injurious cutworms begun. A new area of infestation by the wheat wireworm was found at Newcastle, the first such area found in New Brunswick.

Investigations connected with fruit insects and the aplication of insecticides were conducted in New Brunswick under the direction of the Annapolis Royal laboratory.

HEMMINGFORD, P.Q.

The officers of this laboratory have been concerned chiefly with insects affecting fruit and field crops. A study of the life-history and control of the round-headed apple tree borer was very considerably advanced. Its control with calcium cyanide and a mixture of this material with castor oil, discovered by our officers, has been exceedingly successful. Further extension work on the apple maggot indicated that this insect caused minor losses in commercial orchards. The study of the biology of the white grubs and the injury they cause has progressed very considerably, as has also the study of their natural enemies. A great amount of most valuable information has been secured, which should be applicable, in general, throughout Eastern Canada. Other insects receiving attention at this laboratory were the European corn borer, larkspur leaf-miner, and the Colorado potato beetle. Through publications, lectures, exhibits, correspondence and investigations, every effort was made to assist the farmers and fruit growers in controlling insect pests.

OTTAWA, ONT.

The studies at this laboratory included investigations of vegetable and garden insects. The major studies were concerned with the onion maggot and the tarnished plant bug, in both of which satisfactory progress was made. The control tests of the onion maggot were most promising and suggest that presently this profitable crop may be grown with a minimum of loss. Minor studies were carried on of slugs, carrot rust fly, columbine borer, the comparison of the killing qualities of the newer poisons with the standard ones; preliminary studies in the discovery and value of attractants and repellents, and of the comparative seasonal rate of development and growth of insects and plants throughout Canada, the latter with a view to the proper timing of the distribution of information for the control of insect pests from a central office.

Investigations were conducted from this laboratory on insects affecting shade trees of Eastern Canada, continuing the work formerly carried out at a laboratory at Aylmer, Que. Special attention was given to insect enemies of sugar maples, and particularly to defoliation caused by the maple leaf cutter. Investigations were continued on other important shade tree insect pests, such as canker worms, the white marked tussock moth, the sugar maple borer and the lilac leaf-miner.

VINELAND STATION, ONT.

The oriental peach moth investigation started in 1926 was continued in 1927 at Vineland Station and St. Davids, Ont. Biological studies were carried

on, and investigations on two lines of control, viz: (1) bait traps for the adults, and (2) larvicides directed against the overwintering caterpillars were initiated. As anticipated, there was quite a substantial spread of the moth in the Niagara district and in Essex and Kent counties. In Niagara township it occurred in severe outbreak form and was responsible for heavy losses.

An investigation on the life-history, habits, and control of the common red spider, particularly as a pest of small fruits, was commenced, and further biological and control experimental work on the codling moth, including studies on penetrating dormant washes, was done. Investigations on lubricating oil sprays as a means of controlling the pear psylla, the European red mite, the black cherry aphis and apple aphis were continued, and careful observations were also made on the effect oil sprays have on fruit trees. Comparison spraying experiments were conducted in orchards and bush fruit plantations; observations and notes were made on all the more important fruit insects of the year; and a very considerable amount of extension work was carried on, including the addressing of fruit growers' meetings, answering letters and inquiries received over the telephone, assisting the Niagara Spray Service, and so on.

STRATHROY, ONT.

As formerly, this laboratory serves as the centre of study of field crop and garden insects under mixed farming conditions and for the general publicity work in respect to these insects in southwestern Ontario. Studies of the biology of the armyworm were continued, and also an investigation of the habits and control of the yellow-headed cutworm. Preliminary investigations of the life-history of the Mexican bean beetle were incepted. The annual study of the hessian fly situation was conducted as well as minor studies relating to white grubs, cucumber beetles and miscellaneous cutworms. The preparation of wax mounts of insects and their injuries for exhibition and museum purposes has been continued with the result that excellent displays of the commoner insects and of vegetable and fruit injuries are now available. Many of these were used during the year by the branch at leading exhibitions and fall fairs in Eastern Canada.

CHATHAM, ONT.

The field crop work carried on from the Chatham laboratory for the year related chiefly to the study of European corn borer, general survey of the insects affecting truck crops in southwestern Ontario, with particular reference to tobacco and the various species of Canadian flea-beetles.

The corn borer investigations include a study of the factors controlling egg-laying and a careful analysis of the most effective preliminary treatment of corn refuse before ploughing, with tools available on the farms, and the best combination of farm ploughs and their attachments with which to plough down the crop refuse as recommended in corn borer control practices. These studies were carried on in co-operation with the province of Ontario and marked progress was made in all the work undertaken, and the results, particularly in regard to the treatment of corn refuse, should be of the greatest assistance in corn borer control work.

The Chatham laboratory is the headquarters for parasite investigations. During the year, the officers engaged in these investigations have been particularly active, as a result of which large numbers of parasites have been reared and liberated in areas where the corn borer is causing important damage. A statement regarding these liberations is included in the chapter on "Natural Control Investigations."

During the year, the laboratory was visited by many officials connected with corn borer control in the Dominion and the United States and by large

parties of farmers from those districts in both countries either infested or menaced by this pest. Those attending the International Corn Borer conference at Toledo visited the Chatham laboratory as part of the program on that occasion.

TREESBANK, MAN.

The studies at this laboratory continue to relate particularly to field crop insects. The investigation given greatest emphasis consists of a study of the life-history, habits, and in particular of the immature stages of grasshoppers, insects affecting sweet clover, the wheat-stem sawfly and the hessian fly.

The grasshopper investigation is the outstanding one at the laboratory and is being carried forward as a general study of the grasshoppers of Manitoba and all Western Canada with a special object of recognizing the species of Canadian grasshoppers in the immature stages. A large number of minor studies are in progress concerned with insects of local or periodic importance which are kept under observation in the intervals between outbreaks in order that advice regarding their control may be immediately available. Particular progress was made during the year in the grasshopper, sweet clover leaf miner and wheat-stem sawfly problems.

The laboratory is a centre of widespread interest. Over 500 visitors called during the year to consult the officer in charge and to view the insect exhibit which he has prepared.

SASKATOON, SASK.

The work of the officers at this laboratory was confined entirely to insects attacking field crops. The problems given particular attention were wireworms, bertha cutworm, red-backed cutworm, and a study of the relationship between crop rotation and insect abundance. Many other minor observations were made upon insects of particular interest to officers in neighbouring laboratories, thus contributing to their knowledge of the situation in adjacent territories.

The wireworm and crop rotation problems were given the greatest attention during the year and most important results were secured. Both problems are such as will require several years to complete.

The closest co-operation exists between the local Department of Agriculture and our officers, both in the securing and distributing of insect information, the interchange between the two organizations being of very material benefit to each.

INDIAN HEAD, SASK.

During 1927, the survey of live stock insect conditions, commenced in 1926, was continued. The amount of infestation and damage from warble flies received particular attention and a large number of grubs from different points throughout Saskatchewan were examined to ascertain the species responsible. Both *Hypoderma lineatum* and *H. bovis* were found to be strongly established. Much information of value in outlining control measures was obtained.

A serious outbreak of black flies occurred and was investigated in the Indian Head district. A detailed study of the bionomics of the main prairie mosquitoes was completed, and assistance was given to the Winnipeg Mosquito Committee in their campaign to control the pest in that vicinity. A number of other common live stock insects such as horse flies, horse bot flies, etc., received attention during the season.

An officer was attached permanently to this laboratory in the spring of 1927 to take charge of shade tree insect investigations in the Prairie Provinces. The biology and control of a large number of shade tree insects were investigated, particular attention being paid to the outbreak of forest tent caterpillars which

has now subsided over a great part of the prairie country. The natural conditions which favour the development and final disappearance of these great outbreaks are the subject of special investigation. Improved methods of control were devised for outbreaks of the pine leaf scale, red spider on conifers, and for borers in the trunks of poplars. An effort is made through correspondence to assist the farmers in the control of insect injuries to their trees.

LETHBRIDGE, ALTA.

The activities of the officers at this laboratory are concerned almost entirely with field crop and garden insects. During the past year the major attention was given to a study of the life-history and control in Alberta of the wheat-stem sawfly and to a further investigation of the relation between insects and alfalfa seed production. Studies of the army cutworm were carried forward to the point where forecasting of outbreaks a year in advance is possible and it is planned that the control methods which have been so clearly demonstrated will be given publicity very soon.

The wheat-stem sawfly investigations have progressed particularly as regards the use of trap crops and methods of intensifying the value of local parasites. The pale western cutworm outbreak having virtually disappeared, it has been possible, during the past year, to give a great deal more attention to the sawfly studies. This problem has been one of extreme importance in Alberta, where the sawfly is rapidly extending its territory and causing very great losses.

The alfalfa seed production investigations have made satisfactory progress though the climatic conditions being so exceptional made clear-cut results difficult.

VERNON, B.C.

Fruit insect investigations conducted from this laboratory related to the life-history and control of blister mites, oyster-shell scale, tarnished plant bug injury to peaches, and to dusts and sprays for insect control. Particular attention has been given to oil sprays, both for dormant and for summer use.

Preliminary work on the control of woolly aphis was begun in the fall of 1927 and continued throughout the winter of 1927-28. This project will be conducted in co-operation with the Summerland Plant Pathologist, as the woolly aphis is believed to be spreading the perennial canker of apple trees; a disease of extreme importance.

The rearing and liberation of codling moth parasites were continued during 1927, and a number of minor projects relating to fruit insects were undertaken.

Field crop investigations conducted from this laboratory related to the life-history and control of the clover root borer, which was discovered for the first time in the province. Considerable damage was found to have been done in the northern end of the Okanagan valley and a detailed survey by farms was made and recommendations for its control given out.

As in previous year, investigations of the biology and control of forest insects were conducted from this laboratory. The control operations for bark-beetle outbreaks in yellow pine and lodgepole pine were continued in co-operation with the Dominion and provincial forest services. This control work has been completed for the beetles affecting yellow pine. All these outbreaks have now been brought satisfactorily under control and it will not be necessary to continue this control work in 1928. Our officers conducted extensive surveys for forest insect injuries throughout many parts of the forest region of British Columbia. In connection with these surveys, our officers worked in co-operation with the Dominion and provincial forest services and instructed their

forest rangers in the identification and control of forest insect injuries in their districts. Arrangements were made for reporting outbreaks in their initial stages, so that co-operative control measures might be applied before great injury resulted. Our officers are extending their investigations to other forest insect injuries, particularly those caused by bark-beetles to Douglas fir, Sitka spruce, and mountain balsam. The valuable series of biological studies is in progress, particular attention being paid to the relation between the work of the insect and the injury caused to the timber or to the vitality of the trees.

CRANBROOK, B.C.

A temporary field station was again maintained at Cranbrook, in the Kootenays, where a vigorous control campaign against the Colorado potato beetle was continued by the officer assigned to this project. The provincial Department of Agriculture co-operated by supplying a man and car, and also the dust and dusting machines needed. Very excellent results were obtained and the work will be continued in 1928 with increased dust and dusters at our disposal.

The control of strawberry leaf rollers, cherry fruit-fly, and white grubs was given considerable attention in the Kootenays with excellent results except in the case of white grubs. During the past winter a large number of experiments have, however, been carried on in the laboratory, and we believe we now have a control for the white grubs attacking orchard trees, raspberries, and strawberries. Field tests in control will be made in 1928.

ROLLA, B.C.

A temporary field station was maintained at Rolla, in the British Columbia Peace River Block, to look after the grasshopper campaign in that district. Although enormous numbers of grasshoppers hatched out in several parts of the province, and in some sections became adults, very little damage was done and nearly all died without depositing eggs due to the attack of a fungous disease. No serious grasshopper trouble is expected in British Columbia during 1928.

AGASSIZ, B.C.

Further studies were conducted on the life-history and control of the hop-plum aphis, and the development of the automatic delivery type of spray machine has demonstrated a great saving in cost to the growers. Experiments with nicotine dust were carried out and the possibilities of this method of control have been demonstrated.

Life-history studies on the red spider on hops were made and control measures, based on these findings, have now been formulated.

Direction of mosquito control work at Harrison Hot Springs resulted in a great decrease in the numbers of this serious pest at this health resort.

Observations on the life-history of the clover seed midge were made, and advice tendered to the provincial authorities enabled them to harvest the red clover seed crop on the Sumas reclamation area, free from midge injury.

Assistance was given to the city of Vancouver and adjacent municipalities on matters of earwig and lecanium scale control.

VANCOUVER, B.C.

In the spring of 1927, an officer was assigned to continue a special study of the injuries caused by the western cedar borer. Through the co-operation of the Dominion Forest Branch of the Department of the Interior, an office was provided for our officer in the Forest Products Laboratory at Vancouver and his

work has been carried on in co-operation with the Dominion and provincial forest services. A thorough test of the strength of infested cedar poles was conducted at the Forest Products Laboratory and it was proven that the great majority of borer infested poles are not seriously weakened, for purposes of telegraph and telephone poles, for which this timber is largely used. It is hoped that these investigations will result in providing a market for a large amount of cedar poles that would otherwise be entirely wasted. The results of our investigations are now being published and will shortly be available for distribution.

VICTORIA, B.C.

By request of the Provincial Department of Agriculture, the survey for currant bud mite was continued and completed. Infested bushes were found in the Duncan district and destroyed. In the course of the entire campaign against bud mite, a total of 351 bushes were destroyed. The district is now thought to be free of the pest but one or two plantations are being kept under observation in case any reinfestation develops.

The control operations against the European earwig were continued in the city of Victoria and neighbouring municipalities. A small increase in the infested areas was found in the city and three new localities in the municipality of Oak Bay. Control operations by the city and municipal authorities were supervised and an excellent kill was obtained. Extensive experiments with a view to improving the bait were made this year and an improved bait in which meat meal is included has been devised. This bait gives rather better control and is more attractive to the adult earwigs than the old formula. In consequence of this, control operations can be carried out over a longer period.

The infestation of cherries by larvae of the lesser apple worm on the Saanich peninsula was investigated and the life-history partly worked out, but this study will not be completed until 1928. Several new facts in connection with the habits of this insect were brought to light.

Experiments with poisoned baits for strawberry root weevil were continued this year and a new bait, having all the effectiveness of those previously used, was devised. The bait employing apple waste hitherto used by the growers was a patented formula and was rather expensive. The new bait is composed of shorts and waste raisins and is considerably cheaper. With this bait, using sodium fluosilicate as the poison, a control of 93 per cent was obtained in field trials. It is expected that this formula will be used by the growers in the near future and a saving of many hundreds of dollars will be effected.

Other investigations carried out included control of the narcissus fly, control of ants in houses, comparative trials of dusting and spraying for control of pea aphis, and control of *Aphodius* larvae in lawns at Powell river.

PUBLICATIONS

The following publications have been issued by the Entomological Branch during the year:—

CIRCULARS

27. "The Plum Curculio and Its Control in Quebec," revised edition—by C. E. Petch.
62. "Mosquito Control in Canada"—by E. Hearle and C. R. Twinn.

PAMPHLETS

30. "The Hessian Fly in the Prairie Provinces"—reprint—by Norman Criddle.
80. "The Cabbage Flea-Beetle and Its Control in British Columbia"—by R. Glendenning. Two editions.

In addition to the above, officers of the Entomological Branch have published important papers in technical journals, transactions of the Royal Society of Canada and other organizations.

THE FRUIT BRANCH

The commercial apple crop for 1927 is estimated at 2,810,600 barrels as compared with 2,954,370 barrels in 1926, or 90 per cent of the five-year average.

COMMERCIAL PRODUCTION OF APPLES BY PROVINCES

—	British Columbia	New Brunswick	Nova Scotia	Ontario	Quebec	Canada
	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels
1922	920,400	30,000	1,493,852	1,304,250	141,039	3,889,541
1923	1,110,000	25,000	1,683,330	978,300	42,311	3,838,641
1924	892,030	31,250	1,276,225	684,810	71,175	2,955,492
1925	953,020	40,000	956,060	950,140	70,900	2,970,121
1926	1,311,800	30,000	927,370	573,600	111,600	2,954,370
1927	1,079,500	28,000	925,000	673,500	104,600	2,810,600
5 year average	1,069,270	30,850	1,153,597	772,070	80,117	3,105,845

APPLE EXPORTS FOR SEASONS 1923-27

—	Barrels	Boxes
1923–24	1,326,526	569,295
1924–25	1,170,770	493,309
1925–26	1,156,064	628,144
1926–27	688,270	805,190
1927–28	654,478	568,340

SMALL AND TENDER FRUIT PRODUCTION, 1925-26-27

—	1925	1926	1927
	Bush.	Bush.	Bush.
Cherries	113,555	201,640	216,800
Peaches	200,936	237,950	347,580
Pears	153,690	266,440	332,200
Plums and prunes	79,748	346,800	263,200
	qts.	qts.	qts.
Raspberries	1,960,000	4,744,500	5,232,700
Strawberries	9,245,000	9,739,000	10,946,200
Other berries	2,700,000	4,195,000	3,737,000

Potato and Onion Production

The total potato production for Canada last year amounted to 46,458,000 cwt. as compared with 46,937,000 cwt. in 1926.

The following table shows the acreage and yield by provinces for 1927.

—	Area	Total yield	Merchantable yield
	Acres	cwt.	cwt.
Prince Edward Island	48,800	4,418,000	3,358,000
Nova Scotia	31,628	2,680,000	1,849,000
New Brunswick	46,998	4,204,000	2,985,000
Quebec	162,000	14,175,000	10,490,000
Ontario	159,871	9,297,000	7,159,000
Manitoba	27,705	2,324,000	2,022,000
Saskatchewan	44,143	3,849,000	3,464,000
Alberta	31,136	3,241,000	2,917,000
British Columbia	20,092	2,270,000	1,952,000
Canada	572,373	46,458,000	36,196,000

The Inspection Service

The administration of the Fruit Act including the Fruit Export Regulations and the Standard Package Regulations, and the Root Vegetables Act has been given careful attention. Inspectors were stationed at producing and shipping centres and also made a systematic inspection of factories manufacturing fruit packages. The Requested Inspection Service has again received satisfactory support and is showing creditable expansion.

The following table shows the number and kind of inspections made, by provinces, during the year ending March 31st, 1928.

Province	Administration				Requested inspection service	Total inspections
	Grading and marking, etc., regulations	Fruit export regulations		Standard package regulations		
		Reports	Permits			
British Columbia	3,768	941	62	33	4,475	9,279
Prairies	828	1	.....	.....	614	1,443
Western Ontario	4,909	130	67	155	1,002	6,263
Eastern Ontario and Quebec	2,744	438	109	44	706	4,041
Nova Scotia	3,070	.....	23	701	152	3,946
New Brunswick	591	.....	428	20	3,086	4,125
Prince Edward Island	78	.....	.....	.....	2,568	2,646
Total	15,988	1,510	689	953	12,603	31,743

The total number of inspections made during the year under review as compared with the two previous years are shown in the following table:—

Inspection	1925–26	1926–27	1927–28
Administrative purposes	25,922	19,513	19,140
Requested inspection service	4,060	9,044	12,603
Total	29,982	28,557	31,743

The instructing and training of Inspectors have again been important features and meetings were held in all districts from the Maritime Provinces to British Columbia at the following centres, Middleton, N.S., Perth, N.B., Cobourg, Ont., Winnipeg, Man., Calgary, Alta., Vernon and Kelowna, B.C. In British Columbia the Fruit-Packing-House-Foremen were invited to attend a session of the meeting, the invitation being readily accepted to the benefit of all concerned.

By arrangement with the Secretary of the Ontario Fruit Growers' Association, a display of Ontario barreled apples was made at the association's annual convention at Hamilton. The apples were selected at random from stock offered for sale on the Toronto market. They were inspected and score-cards, stating the defects and whether or not the fruit complied with the requirements of the grade marked upon the barrel, were displayed alongside the fruit. This display gave the members an excellent opportunity to view Ontario apples exactly as offered for sale to the consumer, and indicated where certain packers were failing to comply with the requirements of the Fruit Act.

REQUESTED INSPECTIONS

The Requested Inspection Service is a growing and very important feature of the work undertaken by the branch and gradually spreading over the whole

Dominion. The year ending March 31, 1928, shows an increase of approximately 39 per cent in the number of inspections made as compared with the year 1926-27. British Columbia shows a decrease of slightly over 2 per cent as compared with last year, which is due to a slightly smaller total crop shipped. The Prairie Provinces show a reduction of 9 per cent which is due to the fact that practically all requested inspections are for the purpose of determining the condition of fruits and vegetable products upon arrival, and indicates an improvement in the general condition. Western Ontario shows a rather large reduction of 45 per cent, while eastern Ontario and Quebec show an increase of 10 per cent. The Maritime Provinces show an increase of 300 per cent mostly due to the Service being extended on a large scale to the Province of New Brunswick.

The total inspection certificates issued and revenue received since the inauguration of this Service are as follows:—

Year	Reports issued	Revenue
		$ cts.
1924-25	2,839	14,190 00
1925-26	4,060	19,819 50
1926-27	9,044	43,471 00
1927-28	12,603	61,449 00

The total number of requested inspection certificates issued by Provinces since the commencement of this Service is shown in the following table.

District	1924-25	1925-26	1926-27	1927-28
British Columbia	2,665	907	4,580	4,475
Prairies	72	746	678	614
Western Ontario	63	1,573	1,859	1,002
Eastern Ontario and Quebec	39	663	604	706
New Brunswick	.....		230	3,086
Nova Scotia	.....	171	176	152
Prince Edward Island	.....		1,070	2,568
Total	2,839	4,060	9,044	12,603

Prince Edward Island again requested inspection to cover practically 100 per cent of shipments of table stock potatoes and New Brunswick adopted the policy set by her sister province and requested shipping point inspection of a large percentage of shipments from the principal potato growing counties. Due to marketing conditions the export of New Brunswick potatoes to Cuba has been considerably reduced as compared with that of the season 1926-27 and consequently inspection has been reduced likewise, but all shipments have been inspected before leaving the port of export. Also, all export shipments from Prince Edward Island to the Cuban market have been inspected under this service.

FRUIT ACT

The administration of this Act covered a much wider scope than in previous years. The Order in Council P.C. 2193 dated January 5, 1927, providing grades for tender fruits including cantaloupes, apples in crates, plums and fresh prunes, pears, peaches, field tomatoes, and grapes was put into effect, and inspections made thereunder. In accordance with recommendations by the industry, this Order in Council was amended and a section added which provided that when fruits, the grades for which are provided under this Order in

Council, are packed in bushel, half-bushel, 20-quart, 11-quart, 6-quart or 2-quart baskets with leno or patent covers without a grade designation, the container shall be stamped with the word "ungraded". At a later date, a further amendment was made which provided that apples when packed in baskets must be of at least the minimum size for the No. 3 grade and no culls, and the minimum size for each variety was published in circular form and distributed to the industry.

Regulations providing for the inspection and the issuing of certificates stating the grade and condition of certain fruits intended for export out of Canada, were established by Order in Council P.C. 1609 dated August 27, 1927. These regulations were put into effect in all provinces except Nova Scotia, as provided by the Order in Council.

The following table shows the number of packages of various kinds of fruit inspected during the year ending March 31, 1928:—

Product	No. of packages in lot	No. of packages inspected	Bulk shipments inspected
Apples (barrels)	504,327	54,544	.....
Apples (boxes)	2,518,609	170,245	.....
Apples (baskets)	72,503	8,548	.....
Apples (bulk)	.....	.....	17
Peaches	109,745	8,743	.....
Pears	71,200	6,564	.....
Plums	72,646	6,005	.....
Tomatoes	215,325	20,665	.....
Small fruits	405,073	51,062	.....
Frozen raspberries (barrels)	2,372	402	.....
Grapes (baskets)	269,082	24,583	.....
Grapes (barrels)	380	19	.....
Mixed fruits and vegetables	1,204,244	98,353	.....
Total	5,445,486	450,093	17

The following table shows the total number of inspections of various fruit products during the year ending March 31, 1928, as compared with the year ending March 31, 1927:—

Product	No. of inspections	
	1926–27	1927–28
Apples	10,822	10,909
Peaches	827	571
Pears	449	389
Plums	495	444
Tomatoes	1,062	1,662
Small fruits	3,156	2,813
Grapes	325	292
Mixed fruits	1,862	1,356
Fruits and vegetables		756
Miscellaneous	268	314
Total	21,435	19,506

All violations of the Fruit Act and regulations thereunder have been carefully investigated by the District Inspector for the district in which the offender resides. The number of violations reported and the number of prosecutions during 1927-28 as compared with 1926-27 are as follows:—

Year	Number of violations	Prosecutions	
		Domestic fruit regulation	Imported fruit regulation
1926-27	732	18	8
1927-28	1,257	10	4

THE ROOT VEGETABLES ACT

The following table shows the number of packages of various vegetables inspected during the year ending March 31, 1928:—

Product	No. of packages in lot	No. of packages inspected	Bulk shipments inspected
Potatoes (bags)	2,017,942	121,480	.....
Potatoes (barrels)	376,483	36,847	.....
Potatoes (bulk)	.....	.....	1,981
Onions (bags)	168,357	9,699	.....
Onions (crates)	21,602	1,621	.....
Other vegetables	.....	186	.....
Total	2,584,384	169,833	1,981

The total number of inspections made during the year under review as compared with the previous year are as follows:—

Product	No. of inspections made	
	1926-27	1927-28
Potatoes	5,538	9,447
Onions	745	885
Other vegetables	223	263
Total	6,506	10,595

The number of violations reported under this Act and the number of prosecutions during 1927-28 as compared with 1926-27 are as follows:—

Year	No. of violations	Prosecutions
1926-27	727	2
1927-28	511	1

FRUIT EXPORT REGULATIONS

The Export Fruit Regulations provided by an amendment to the Fruit Act introduced during the previous Session of Parliament were enacted by Order in Council which provided that all apples, pears and plums intended for export

out of Canada shall be inspected and an export certificate issued stating that the fruit complies with the requirements of the Fruit Act and is of the grade designated. It will be noted that the regulations were not applicable to exports from Nova Scotia.

Under these regulations 1,510 shipments were inspected and certificates issued and in addition 689 permits for export were issued which permits covered mostly single package gift shipments, the inspection of which could not be made.

The following table shows the number of packages exported, the province or origin and the country to which exported:—

—	Que.			Ont.		B.C.	N.B.		P.E.I.	Prairies	Other fruits B.C.-Ont.	
	Bls.	Bxs.	Bskt.	Bls.	Bxs.	Bxs.	Bls.	Bxs.	Bxs.	Bxs.	Bxs.	Bskt.
Austria					1							
Bahamas					1							
Barbados	1											
Belgium		13			6							
Bermuda								1				
Ceylon						450						
China					1	9,193					55	
Denmark	4			1,637		17,199						
Egypt						601						
Fiji						167						
Finland		4				2,250						
France	5	83			21			1				
Germany	2					1,512						
Great Britain	630	1,145	617	44,304	5,389	365,061	4	36	3	4	10,005	1,606
Hawaii						316						
Holland		1			3							
India	2			1		1,460						
Ireland		8		2	11	757						
Italy					3							
Jamaica		1		1								
Japan						2						
Malta						1						
Newfoundland						4,506						
New Zealand						32,506						
Philippines						3						
Scandinavia				2,081		51,284						
South Africa				360	6	18,150						
South America				361		1,516						
Sierra Leone					53							
Switzerland		1			6			1				
U.S.A		2		12,386	817	120,454					1,400	702
Unknown	1	163		4,998	901	25,048	200	4				
Vancouver for export						29,073					1,327	

The following table shows the number of inspection certificates and release permits issued under these regulations together with revenue received, by provinces:—

Province	Export certificates	Release permits	Revenue
			$ cts.
British Columbia	941	62	4,649 40
Prairies	1		20
Western Ontario	130	67	667 80
Eastern Ontario and Quebec	438	109	1,519 40
Nova Scotia		23	2 60
New Brunswick		428	51 00
Prince Edward Island			
Total	1,510	689	6,890 40

STANDARD PACKAGE REGULATIONS

Under these regulations barrels, boxes, baskets, crates, berry boxes and other fruit containers were inspected. The following table shows the number of lots examined during 1927-28 as compared with the two previous seasons:—

Year	1925–6	1926–7	1927–8
Lots inspected	637	773	943

ONION WAREHOUSE

For the purpose of showing the value of proper storage facilities in standardizing the marketing of the onion crop, a frost-proof storage warehouse was built in 1926 at Leamington, Ont., and has since been operated by this department under the immediate supervision of the Fruit Branch.

The storage warehouse in 1926 was used to capacity and was the means of creating an improved system of distributing, resulting in a more satisfactory levelling of the market. With the small crop of onions in 1927, there was not the same necessity for storage and only a few cars were held, the total number of crates received for storage in 1927 amounting to 5,572 as compared with 24,773 in 1926.

VISIT OF FRUIT COMMISSIONER TO GREAT BRITAIN

The Dominion Fruit Commissioner, on invitation of the Empire Marketing Board, spent several weeks in the British Isles, studying conditions and marketing possibilities for Canadian fruits and vegetables.

In the course of this visit, it was his privilege to interview the chief importers, brokers, private treaty salesmen, wholesalers, and retailers in London, Liverpool, Manchester, Birmingham, Bristol, Cardiff, Southampton, Edinburgh, Glasgow, Dublin, Belfast and several of the smaller distributing centres. Handling conditions at the principal docks, warehouses, and cold stores, as well as methods of classification of packs also received attention. Research stations at East Malling, Cambridge, Long Ashton and Campden were visited, and meetings of the subcommittees on Wastage and Fruit Intelligence and of the Fruit Committee of the Empire Marketing Board were attended, also meetings of the British growers and of the retail and wholesale and brokers' organizations.

For comparative purposes some attention was given to production conditions, and several producers' markets, where direct sale is made to the wholesale and retail distributors, were visited.

MARKETS DIVISION

The Markets Extension Division of the Fruit Branch maintains a service of information to the fruit and vegetable industries in disseminating crop and market news relating to domestic, import and export conditions. The crop information during the past season was compiled in co-operation with the Dominion Bureau of Statistics and issued in the Fruit and Vegetable Crop Report from June to November inclusive. These reports contained estimates and conditions of the leading commercial fruits and vegetables produced in Canada, as well as those in foreign countries that offered competition to our own products. In order that the reports would reach their readers at the earliest possible date after compilation a new departure was followed (during the past season) in having them mimeographed instead of printed. Six to eight days were thus saved and judging by the comments received from members of the industry the system appears to be proving more satisfactory than the old method. Market prices were published

in the Telegraphic Market Newsletter weekly from January to July inclusive and twice weekly during the balance of the year. In addition the summary of market conditions was broadcasted by radio twice weekly through the Stations at Ottawa, Montreal, Quebec and Moncton and towards the end of the year also by the station at Toronto.

The fruit crop throughout the Dominion proved generally satisfactory to the growers financially. This is shown in the estimated total shipping point value of commercial fruits in Canada during 1927, which is placed at $17,605,995 as compared with $15,224,570 in 1926. Apples were a light crop in the eastern provinces, while in British Columbia an average crop was harvested. Prices for both barrelled and boxed apples were very satisfactory on both domestic and export markets. The quality of the fruit was only fair, due to the prevalence of scab in all provinces, including some sections in British Columbia. Ontario also suffered considerable loss through aphid injury. Owing to the light crop in both Canada and the United States the trans-Atlantic shipments were considerably reduced compared with the previous season. The shortage of Virginia barrelled apples stimulated the market for Canadian stock with the result that Nova Scotia greatly benefitted from the higher price level. Other fruit, such as pears, peaches, cherries, strawberries, raspberries and grapes, produced heavy crops and obtained slightly firmer prices compared with 1926. On the other hand plums, apricots and berries were lighter.

The following table is a final estimate of the production and shipping point value of fruit in 1927 as compared with 1926:—

Description	Year	Total Quantity	Average Price	Total Value
		(bbls.)	$ cts.	$
Apples	1926	2,954,370	3 28	9,688,162
	1927	2,810,600	3 70	10,411,035
		(bush.)		
Pears	1926	266,440	1 79	475,698
	1927	332,200	2 00	663,730
Plums and prunes	1926	346,800	1 30	450,840
	1927	263,200	1 80	473,780
Peaches	1926	237,950	2 54	603,658
	1927	347,580	3 03	1,051,765
Apricots	1926	56,650	2 25	127,462
	1927	18,000	3 74	67,250
Cherries	1926	201,640	2 86	577,040
	1927	216,800	3 62	784,470
		(qts.)		
Strawberries	1926	9,739,000	0 14	1,402,830
	1927	10,946,200	0 14	1,516,145
Raspberries	1926	4,744,500	0 15	702,330
	1927	5,232,700	0 15	784,000
Other berries	1926	4,195,000	0 11	476,550
	1927	3,737,000	0 13	471,420
		(lbs.)		
Grapes	1926	24,000,000	0 03	720,000
	1927	34,560,000	0 04	1,382,400

Vegetable growers experienced a varied yield, especially with potatoes and cabbage. The potato crop was a normal yield, amounting to approximately 48,000,000 cwt. Prices from the beginning of the season until January ranged from $1.35 to $2 per cwt. Canada A Grade wholesale to the retail trade, but seriously declined from January until the completion of the season when they reached as low as 75 cents per cwt. for the same grade. The low prices were principally brought about owing to the revision of the tariff upwards in Cuba which went into effect from December to June and the poor demand in the United States, both conditions causing heavy supplies being thrown on the domestic markets. Cabbage reached the low price of $6 to $9 per ton, causing many growers to refuse to

sell, preferring to feed to stock. Onion growers experienced a good year for their product, obtaining satisfactory prices, although British Columbia growers experienced a set back in losing a large portion of their crop through weather conditions and the poor keeping quality that followed.

During the year further investigational work was conducted in endeavouring to develop export trade in close co-operation with the Transportation Division of this branch and the Trade Commissioners of the Department of Trade and Commerce. Trial shipments of apples were sent to Argentina, Straits Settlements, India and Peru and a shipment of seed potatoes to South Africa. In addition to opening up new markets, one of the objects of these trial shipments was to work out the best shipping routes and to ascertain the carrying qualities of our fruit and its suitability for foreign markets. Delicious, Winesap, Rome Beauty and Ben Davis proved very acceptable in South America, Winesap and Newtown Pippin in Straits Settlements and India, a preference being shown for Newtown in the latter country. There is an opportunity in developing trade with all these countries, providing Canadian exporters are in a position to quote prices equal to our competitors and maintain continuity of supplies.

Exhibition work was continued during the past year, exhibits being placed at all the Class A Fairs in the Prairie Provinces, including Brandon, Calgary, Edmonton, Saskatoon and Regina and at the Canadian National Exhibition and Royal Agricultural Show at Toronto and the exhibitions at Ottawa and Sherbrooke, as well as the Montreal Apple Show. The object of placing the exhibit at these exhibitions was to advertise Canadian grown fruits and vegetables and to bring their uses prominently before the public. In addition to the above exhibitions, an exhibit was also placed at the Imperial Fruit Show, Manchester, supervised by the Canadian Fruit Trade Commissioner in co-operation with the Empire Marketing Board. Apples such as McIntosh, Gravenstein and Delicious were secured in the various provinces and sent over for display purposes as well as for free distribution to the visitors at the show. The distribution apples were financed by the Empire Marketing Board, a sample being handed out to over five thousand visitors. The Empire Section was eliminated from the competitive classes at this show but the Overseas Section, allowing competition between the provinces, was continued. In the Overseas Section there were seventy-six entries from Canada as compared with twenty-nine in 1926 and twenty-eight in 1925. The Agents General's Cup was won by Nova Scotia.

Transportation Division

The Transportation Division of the Fruit Branch affords service of practical assistance in all questions of rates and conditions of carriage for the transportation of fruits and vegetables. Through close co-operation with the Markets Extension Division, and by constant contact with growers and shippers, the trade, the carriers and the traffic, this division seeks correction of practices, improvement of facilities and adjustment of rates wherever any of these are found to be inimical to satisfactory carriage or marketing.

While its interest is naturally benevolent to the industry as a whole, with the producer its first concern and the consumer next, the Transportation Division is in amiable contact with the trade and the carriers, enjoying the hearty co-operation of the carriers in practical tests looking to betterments in loading practices or of their equipment or facilities for temperature control, and it is assumed they appreciate that complaints launched through our hands are toned, where necessary, to reasonableness, and aim at adjustments designed to help the industry and to create or stimulate traffic.

The function of the Transportation Division is to no small extent that of a traffic department for the fruit and vegetable growers and shippers of Canada,

which body, although including several large commercial organizations, includes as well those grower-shippers and buyer-shippers unacquainted with other than purely local transportation questions. From these and the Provincial Fruit Growers' Associations requests are received for information, and for investigations, and complaints are examined and advanced according to the merit we find in them. The service had its origin in a request from the provincial associations for what they themselves and the individual shippers found quite incapable of maintaining to their own best interests.

Current activities include a number of investigational subjects of possible far-reaching import. Looking to the future of fruit transportation as well as to the correction of many of its present ills, it is apparently essential that equipment be developed for transit readings of inside temperatures in all temperature-controlled carlot traffic, in order that the progressive temperature of the product rather than outside conditions shall govern transit application of refrigeration, heat or ventilation. It is our hope that out of the continued improvement of resistance and thermo-couple thermometers for distant readings there will result portable, sturdy and inexpensive apparatus capable of adoption for such a refinement in temperature-controlled traffic.

Pre-cooling, or lowering the temperature of fruit to an optimum temperature for satisfactory carriage before loading into cars, appears to be somewhat prejudiced by its cost, although admitted to have increased the radius of safe carriage quite considerably. Recognizing that in some districts this cost is considered an avoidable marketing expense or possible economy, we have considered it worth while to attract attention to its offset, or possible offset, of another item of expense, transit re-icing, which for a four-day or five-day trip of a car loaded with field-warm fruit may exceed the expense of initial icing. An investigation now under way aims to determine a reasonable radius for a pre-cooled car and load, initially iced but not re-iced in transit, and, by comparing this total expense at shipping point with that for initial icing and transit re-icing of field-warm loads, to approximate the net cost of pre-cooling. We are already convinced that less than one-half of the pre-cooling charge is a net outlay for safer transportation.

An investigation is under way into the respective merits of brine tank vs. the newest bunker type refrigerator cars, for fresh fruits and vegetables and for other products of agriculture. Brine tank cars have been considered essential for transportation of dressed meats and some other perishable goods, and while on its introduction this car was found less satisfactory for fruits and vegetables this branche has co-operated with the carriers for its improvement for this traffic, being conscious of its possibilities and urging reasonableness in the policy of the railways that if the greater volume of refrigerated traffic can be served best with this type of car it should be adopted, if at all possible, for general utility. Their situation has been quite different to that of the carriers in the United States, where the packing concerns own their own refrigerator cars, heretofore all brine tanks, leaving the carriers free to equip themselves with cars of type best suited to the only other traffic of comparable volume, fruits and vegetables. But on introduction of an improved bunker type car with divided wire basket bunkers, evidently capable of handling dressed meats, it was thought that the question of a general utility refrigerator car for Canada may now be reopened, and arrangements have been made with the two large Canadian carriers to co-operatively match this new bunker type car against their brine tanks, with various kinds of traffic. This investigation is likely to spread over at least two seasons.

New Brunswick potatoes are shipped extensively in bulk in refrigerator cars for winter movement under heater protection, often with some frost damage

where the load is in contact with the lower walls. On complaint of these shippers to the Railway Board, contending an obligation on the carriers to provide special features for greater safety of this traffic, the board required the railways to specially equip fifty refrigerator cars each for trial during the past winter, but with specifications still not entirely satisfactory to the shippers, whereupon we made an inquiry and practical test and offered the Railway Board certain suggestions for their consideration in deciding what may be required of the railways for the future.

Methods of loading cars to facilitate refrigeration, ventilation or heater protection, and in prevention of load shifting and damage, are questions of constant experiment and instruction by this division. While time and material economies have their appeal, thoughtful shippers usually need no more than a clear explanation of what experience would ultimately teach, that the care exercised in producing and preparation for market can profitably be continued in car loading, the marketing success of the shipment being dependent upon both.

Among traffic matters engaging the attention of the division during the past season were the following of more than local interest:—

Carriers' Protective Service as heretofore applying on fruit and vegetable carlots from British Columbia to the Prairie Provinces will apply on like traffic to Eastern Canada from the autumn of 1928, on an agreed extension of tolls;

Some further reduction in express carlot rates on fruit and vegetables from British Columbia to the marketing centres of Eastern Canada, in aid of competition with like products from the Pacific coast farther south;

Elimination of switching charge heretofore applying on express carloads from a number of pre-cooling and packing plants located on private sidings in British Columbia, but reasonably convenient to the main track;

Lower assembly rates for apples in freight carloads for dehydration in the Okanagan valley of British Columbia;

Special rating for plums in straight or mixed freight carlots from Ontario points to Montreal for export;

A complaint was brought before the Railway Board by the Nova Scotia Shippers' Association, just before the Maritime Freight Rates Act took effect,* but with its grounds unsubstantiated and the rates of themselves not proven unjust or unreasonable the complaint was dismissed.

On the whole there is every indication that the balance of interest among the shippers and the trade is turning from questions of line-haul rates to the services and their tolls for temperature control and safest possible carriage of this highly perishable traffic.

Canadian Horticultural Council

The Canadian Horticultural Council, which was organized in March, 1922, with the object of advancing all matters tending toward the improvement of the horticultural and allied industries, continued to function during the past year in a manner beneficial to the industry. Its organization includes a plant registration bureau, and full information with respect to its activities may be obtained from the annual report of the council. Financial support through the Fruit Branch was continued during the year to the extent of a grant of eight thousand dollars.

* Against their rates on apples to Halifax for export, since this Act took effect no further general complaint from the Maritime Provinces has been brought to our attention.

THE PUBLICATIONS BRANCH

The Publications Branch has two main functions, viz., distribution and publicity. By means of the distribution of literature prepared by the different branches of the department, the Publications Branch acts as the connection between the department and those interested in the work of the department—farmers, live stock breeders, dairymen, fruit growers, gardeners, etc. Through the publicity prepared and distributed by the Publications Branch these many and varied agricultural interests are made aware, through the medium of the press, of the regular encyclopædia of literature the department has available for distribution. This work of publicity is perhaps the more important, because without it the farmers, breeders, and growers would miss the very essential point of contact made through the agricultural weekly and semi-weekly press. It may not be out of place to take this opportunity of thanking the press for the whole-hearted co-operation it has always given in this connection.

The literature distributed by this branch consists of reports, bulletins, pamphlets, and circulars covering every branch of agricultural endeavour. The total listed is 438, and additions are being made to this list every week. It includes "Seasonable Hints", issued three times a year by the Experimental Farms Branch, and market reports, news letters, crop reports, and press notices. During the past fiscal year 1,281,290 copies of the three issues of "Seasonable Hints" have been distributed. The mailing list contains 374,316 names, and in addition the banks, elevator companies, etc., receive small bulk lots for the use of their farmer patrons.

Special mention may be made of the demand for market reports, a service which is placing the producer on an equality plane with the middleman to whom he sells his produce. These comprise the following: (Daily) "Egg and Poultry Market Report". (Weekly) "Dairy Market Report"; "Egg and Poultry Market Report"; "Telegraphic Fruit Crop Report"; "Live Stock Market Intelligence". (Bi-monthly) "Seed, Feed, and Fertilizer Markets Reports". (Monthly) "Cold Storage News Letter"; "Dairy News Letter"; "Fruit Crop Report" (May-October).

During 1926-27, 914,130 copies of these market reports were distributed. This year 1,186,874 copies were sent out, showing an increase of 29 per cent.

During the year 1927-28 the number of new and revised reports, bulletins, pamphlets, and circulars of the regular departmental series received from originating branches numbered 134, and of these 630,802 copies were distributed.

In response to direct applications by letter and cards 1,090,255 copies of publications were mailed.

In all a total of 3,991,706 copies of all publications, reports, etc., was distributed during the year, compared with 3,691,000 last year, an increase of 8·1 per cent. These by classes were as follows:—

Seasonable Hints	1,281,290
Market Reports, etc	1,333,004
Press Notices, etc	287,147
Publications, New	630,802
Publications, Old	459,463
Total	3,991,706

NEWS SERVICE

A new feature in connection with the publicity of this branch has been provided for in the 1928-29 estimates. This is the addition to the editorial staff for the purpose of inaugurating a news service to make contact between the department and the daily press. It has been felt for some time that this field

for departmental publicity was almost entirely lost, except in so far as the representatives of the dailies were able to pick out occasional news for themselves. The appointment of an editor will enable the branch to keep in touch with the other branches and the administrative officers of the department, and gather departmental news for distribution to the daily press. As occasion arises up-to-the-minute news will be sent to the dailies through the Canadian press. The branch will then be making use of a most complete publicity service, which will embrace the daily and agricultural press, together with the weeklies, semi-weeklies and self prints.

MAILING LIST DIVISION

During the year this division handled the addressing of 2,814,660 envelopes, compared with 2,547,000 in 1926-27 and 2,047,000 in 1925-26. Automatic machinery is used for this work, and in maintaining the mailing lists over 57,607 new stencils were made for fresh applicants.

The main lists to be maintained, kept up to date, changes of address made, and envelopes addressed are the "Seasonable Hints" list of some 389,784 names; a special general list of 3,424 names to which all new publications are sent as soon as issued, covering the parliamentary officials, institutions, exchanges, etc.; twenty-five lists to which Experimental Farm and Station Reports are sent; and nine lists for market reports and news letters. The total number of mailing lists maintained is 108. A complete classification is not necessary. It is interesting to note, however, that the names and addresses on these mailing lists represent the cutting by automatic machinery of 461,792 plates, compared with 431,472 for last year. The changes in these lists have been less than for the previous year, 24,355 names being removed and 2,129 changes made in addresses, compared with 43,343 removals and 2,764 changes in addresses for the previous year.

To the branch lists the Canadian Horticultural Council has added an "E" list made up of members of the Ontario Fruit Growers containing 780 names, and a newspaper list of 140 names. Four lists have been revised, ninety-four have been active, five cancelled, and ten have not been used. The five cancelled were lists of drovers to the Toronto, Montreal, Edmonton, Calgary, and Winnipeg Stock Yards, a total of 3,200 names.

ENVELOPES AND SLIP LISTS ADDRESSED

—	1926-27	1927-28	Increase	Decrease
Bulletins and other printed matter	1,250,785	1,266,245	15,460	.....
Market and crop Reports	1,173,331	1,389,210	215,889	.....
Circular letters, press notices, etc.	77,246	64,586	.....	12,660
Other Branches	54,499	64,708	10,209	.....
Slip Lists	18,050	29,911	11,861	.....
Totals	2,573,911	2,814,660	253,419	12,660

Publications issued and distributions made by the Publications Branch, April 1, 1927, to March 31, 1928:—

Branch and Title	Received	Distributed
Report of the Minister of Agriculture for year ended March 31, 1927	4,994	4,800
Dairy and Cold Storage Branch—		
Causes of Variation in Percentage of Fat in Hand Separator Cream, Cir. 18 N.S. (Reprint)	20,000	1,410
Why and How to Use Cheese, Pam. 7, N.S. (Reprint French)	14,975	350

Branch and Title	Received	Distributed
Dairy and Cold Storage Branch—Concluded		
Cooling of Milk for Cheesemaking, Pam. 28, N.S. (Reprint Bul. 22)	14,950	600
Why and How to Use Milk, Pam. 36 N.S. (Reprint)	39,750	4,300
Home-made Frozen Desserts, Pam. 49 N.S. (French)	16,000	1,425
Producing Clean Milk, Pam. 79, N.S.	14,900	2,780
The Testing of Milk and Cream and Dairy By-products by Means of the Babcock Test, Bul. 14, N.S. (Reprint)	4,975	85
Small Cold Storage and Dairy Buildings Bul. 16 N.S. (French Reprint Bul. 49)	1,819	510
The Composition of Canadian Cheddar and Process Cheese, Bul. 79, N.S. (French)	3,975	1,170
The Dairy Industry Act, 1914, as Amended in 1923, A. O. & R. 13	2,000	467
The United States Federal Import Milk Act (Some of Its Provisions) A.O.R. 23	8,500	6,870
The Entomological Branch—		
The Red-backed Cutworm and Its Control in the Prairie Provinces, Pam. 69 N.S. (Reprint)	4,900	524
The Plum Curculio (Conotrachelus nenuphar Herbst.) and Its Control in Quebec, Cir. 27 N.S. (Reprint and revised)	1,200	900
The Oriental Peach Moth in Ontario, Cir. 57 N.S.	3,200	1,250
The Hessian-fly in the Prairie Provinces, Pam. 30, N.S. (Reprint)	4,750	150
Methods of Protection from Mosquitoes, Black-flies and Similar Pests in the Forest, Pam. 55 N.S. (French)	2,800	1,191
The Cabbage Flea-Beetle and Its Control in British Columbia, Pam. 80 N.S. (Revised)	1,400	1,400
The Colorado Potato Beetle in Canada, Bul. 52, N.S. (French)	500	500
The More Important Shade Tree Insects of Eastern Canada and Their Control, Bul. 63, N.S. (French)	1,900	1,900
The Experimental Farms Branch—		
Report of the Director, March 31, 1926, French	14,220	14,050
Report of the Director, March 31, 1927	13,580	8,386
Report of the Division of Animal Husbandry, March 31, 1926	16,230	12,530
Report of the Bee Division, for the year ending March 31, 1926	10,500	8,100
Report of the Division of Bacteriology for the year ending March 31, 1926	4,800	4,800
Report of the Division of Botany, for the year ending March 31, 1926	5,000	4,000
Report of the Cereal Division, for the year ending March 31, 1925 (French)	8,000	7,800
Report of the Cereal Division for the year ending March 31, 1926	8,000	4,100
Report of the Division of Chemistry for year ending March 31, 1925 (French)	2,500	1,240
Report of the Division of Chemistry for year ending March 31, 1926	6,000	3,800
Report of Division of Field Husbandry for year ending March 31, 1926	12,200	8,200
Report Division of Economic Fibre Production, year ending March 31, 1926	5,000	3,600
Report of Division of Forage Plants for years 1924-25, French	2,000	2,000
Report of Division of Forage Plants for year ending March 31, 1926	5,000	4,000
Report of the Division of Horticulture for year ending March 31, 1925, French	4,000	2,450
Report of the Division of Horticulture for year ending March 31, 1926	10,500	5,550
Report of the Poultry Division, year ending March 31, 1925, French	19,500	19,000
Report of the Poultry Division, for year ending March 31, 1926	28,200	12,865
Report of the Tobacco Division, for year ending March 31, 1925 (French)	2,500	2,400
Report of the Tobacco Division for year ending March 31, 1926	9,000	5,000
Report of Experimental Farm, Agassiz, B.C., for the year 1926	6,500	6,462
Report of Experimental Sub-station, Beaverlodge, Alberta, 1925	675	675
Report of Experimental Farm, Brandon, Man., for the year 1926	1,100	950
Report of Experimental Station, Cap Rouge, Que., for the year 1926	21,200	3,300
Report of Experimental Station, Charlottetown, P.E.I., for the year 1926	7,400	7,100
Report of Experimental Station, Farnham, Que., for the year 1926	2,900	1,700
Report of Experimental Station, Fredericton, N.B., for the year 1926	11,450	8,210
Report of Experimental Station, Harrow, Ontario, for the year 1926	6,000	5,640
Report of Experimental Farm, Indian Head, Sask., for the year 1926	12,450	12,400
Report of Experimental Station, Invermere, B.C., for the year 1926	5,300	5,000
Report of Experimental Station, Kapuskasing, Ontario, for the year 1926	8,000	5,040
Report of Experimental Station, Kentville, N.S., 1926	6,880	6,660
Lacombe, Alberta, Experimental Station Report for year 1926	7,000	6,900
Report of Experimental Station, Lennoxville, Que., for the year 1926	9,050	6,250
Report of Experimental Station, Lethbridge, Alberta, for the year 1926	4,750	3,890
Report Experimental Farm, Morden, Manitoba, for the year 1926	4,050	3,900
Report of Experimental Farm, Nappan, N.S., for the year 1926	5,000	4,520
Report of Experimental Farm, Rosthern, Sask., for the year 1926	5,000	4,900
Report of Experimental Station, Ste. Anne de la Pocatiere, Que., for 1926	3,000	3,000
Report of Experimental Station, Scott, Sask., for the year 1925	4,650	4,650
Report of Experimental Station, Sidney, B.C., for the year 1926	4,600	4,550
Report of Experimental Station, Summerland, B.C., for the year 1926	6,000	5,550
Report of Experimental Station, Swift Current, Sask., for 1926	5,450	5,450
Report of Experimental Sub-stations, Fort Vermilion, Alta., Fort Smith, N.W.T., Salmon Arm, B.C., Fort Resolution, N.W.T., Betsiamites, Que., Fort Providence, N.W.T.	5,700	4,600

Branch and Title	Received	Distributed
The Experimental Farms Branch—Concluded		
Report of Illustration Stations in Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island for the year 1926	6,450	4,800
Report of Illustration Stations in British Columbia, Alberta, Saskatchewan, and Manitoba, for the year 1926	7,500	4,280
Guide to the Experimental Projects of the Dominion Experimental Farms	900	900
The Household Preservation of Eggs, Circular 31, N.S.	31,890	5,290
Soil Examination for Farmers, Cir. 32	2,000	500
Improving Incubation by Increasing Humidity, Cir. 42, N.S.	10,000	2,110
Production of Alfalfa on Range Lands of Saskatchewan and Alberta, Cir. 53, N.S.	5,800	2,150
How to Rid a Henhouse of Mites, Cir. 59	19,700	1,925
Crown Gall of Fruit Trees and Small Fruits, Cir. 58, N.S.	20,200	5,738
Seed Treatment for Cereal Smuts, Circular 56, N.S.	14,700	5,280
White Pine Blister Rust, Cir. 48, N.S.	7,300	2,500
The Feeding of Swine, Cir. 61, N.S.	24,900	.....
Studies in Raspberry Diseases, Pam. 72	1,900	1,750
Legume Inoculation, Pam. 81, N.S.	17,300	8,570
How to Caponize, Pam. 12, N.S.	5,000	840
Apple Scab, Pam. 82, N.S.	12,900	3,690
The Combine Reaper-Thresher in Western Canada, Pam. 83, N.S.	15,150	10,179
Canadian Certified Seed Potatoes, Pam. 84	25,300	4,705
Take-all, A Destructive Disease of Wheat, Pam. 85, N.S.	9,500	5,000
Screenings as a Feed for Live Stock, Pam. 87, N.S.	10,375	6,913
The History and Present Status of Wheat Production in Canada, Pam. 89, N.S.	9,700	4,600
Bran, Shorts, Middlings, and Feed Flour, Bulletin 2, N.S.	1,000	500
Pigeons, Bulletin 15, N.S.	2,800	1,400
Hardy Roses, Bul. 17, N.S. (Revised)	28,900	9,190
Alkali Soils, Bulletin 21, N.S.	4,800	1,194
Rabbits, Bulletin 28, N.S. (Revised)	20,000	15,255
Medicinal Plants and Their Cultivation in Canada, Bulletin 36, N.S.	9,050	1,870
Hay and Pasture Crops in Northwestern Saskatchewan, Bul. 40, N.S. (Reprint)	3,000	350
Experiments with Wheat at the Dominion Experimental Farm, Brandon, Manitoba, A Summary, 1889-1923, Bul. 42, N.S.	3,000	600
The Prairie Farmer's Vegetable Garden, Bulletin 43, N.S. (Reprint)	13,000	7,550
Turkeys, Their Care and Management, Bul. 46, N.S. (Reprint)	25,100	7,225
Tomato Diseases, Bul. 51, N.S. (Reprint)	7,200	6,450
The Cultivation of the Apple in Canada, Bul. 55, N.S.	14,626	2,130
A Survey of Canadian Plants in Relation to their Environment, Bul. 58, N.S. (Reprint)	5,000	1,140
Swine Husbandry in Central Alberta, Bul. 73, N.S. (Reprint)	15,150	6,940
Wintering Bees in Canada, Bul. 74, N.S.	9,500	1,755
Tobacco Growing in Southwestern Ontario, Bul. 76, N.S. (Reprint)	12,200	9,262
Preserving Fruits and Vegetables in the Home, Bul. 77, N.S.	39,900	34,370
The Strawberry and Its Cultivation in Canada, Bul. 80, N.S.	19,720	11,325
Smut Diseases of Cultivated Plants, Their Cause and Control, Bul. 81, N.S.	9,780	4,780
Beets and Carrots, A Guide to Seed Growers, Bul. 82, N.S.	22,300	8,330
Garnet Wheat, Bulletin 83, N.S.	3,340	3,290
Field Roots in Canada, Bulletin 84, N.S.	4,500	2,105
Root-rots and Foot-rots of Wheat in Manitoba, Bulletin 85, N.S.	7,000	3,000
Lime in Agriculture, Bulletin 86, N.S.	7,750	1,640
The French-Canadian Horse, Bul. 87, N.S.	17,750	7,035
Ornamental Trees, Shrubs, and Woody Climbers, Bul. 89, N.S.	34,340	4,255
Banner Oats, The Best Variety for Quebec, Bulletin 91, N.S.	44,650	8,820
Manures and Fertilizers, Their Nature, Functions and Application, Bul. 92, N.S.	14,080	4,315
Growing and Feeding Field Roots, Bul. 94, N.S.	19,940	770
The Conversion of Dry Roughage into a Succulent Feed, an Examination of the Sugar Jack Process, Bul. 96, N.S.	4,500	4,300
The Fruit Branch—		
Fruit and Vegetable Crop and Market Summary, 1926-27	7,200	6,880
The Health of Animals Branch—		
Report of the Veterinary Director General for year ending March 31, 1927	4,025	4,000
Mange in Horses, Cattle and Sheep, Bulletin 31, N.S.	2,000	600
'Astragalus Campestris' and other stock poisoning plants of British Columbia, Bulletin 88, N.S.	5,500	1,277
The Live Stock Branch—		
Report of Committee on Dressed Poultry Standards	8,100	4,900
Canadian R.O.P. for Pure-bred Poultry Record Year 1925-26, Report No. 7	6,040	5,520
Canadian R.O.P. for Pure-bred Cattle, Report No. 19	6,100	2,200
The Origin and Quality of Commercial Live Stock Marketed in Canada in 1926, Report No. 7	1,920	1,80
The Candling of Eggs, Cir. 41, N.S. (Rpt.)	18,000	40

Branch and Title	Received	Distributed
The Live Stock Branch—Concluded		
How to Reduce the Meat Bill, Recipes for Utilizing the Cheaper Cuts of Beef, Pam. 43, N.S. (Reprint)	25,000	9,045
Hog Marking, Pamphlet 88, N.S.	3,000	1,560
Swine Husbandry in Canada, Bul. 93, N.S.	6,500	300
The Grading and Marking of Eggs, Regulations made under the provisions of the Live Stock and Live Stock Products Act	5,000	1,410
The Seed Branch—		
Weeds and Weed Seeds, Bul. 4, N.S. (Rept.)	29,926	23,796
Fertilizer Analyses, 1926-27, Pamphlet 86, N.S.	2,000	2,000
The Seeds Act, 1923, with the Regulations made by the Minister of Agriculture, Acts, Orders and Regulations No. 11, Oct. 1927	6,600	1,900
Supplement to Regulations Under the Seed Act, made by the Minister of Agriculture, Acts, Orders and Regulations No. 11, October, 1926	7,000	7,000
The Publications Branch—		
List of Publications, 1928, Pam. 90, N.S.	35,000	5,825
Miscellaneous—		
Canadian Seed Growers' Association, Classification of Canadian Spring Wheat Varieties—Paper presented at Annual Meeting of Canadian Seed Growers' Association, June, 1926. With Appendix Plant Breeders' Series No. 1	4,800	2,763
Dehydration of Fruits and Vegetables in Canada, Bulletin 90, N.S.	7,000	7,000

Supervision of Race-track Betting

With the assistance and co-operation of the Royal Canadian Mounted Police, the Department arranged for the supervision of race-track betting on all race tracks in Canada at which pari-mutuel betting is permitted under the Criminal Code.

During the year, race meetings were held on 31 race tracks, a reduction of one in comparison with 1926, but on these race tracks 354 days' racing took place as compared with 322 in the previous year. This was due to the fact that on all Ontario race tracks the full 14 days' racing took place, while the number of days' racing in British Columbia was also increased. The total amount wagered on all tracks was $47,915,828—an increase of over three and a half million dollars over 1926. The increase was most apparent in the provinces of Ontario and British Columbia, and in both cases was probably due to the greater number of days racing.

The total amounts retained by associations as their legal percentage of wagers was $3,278,178.58 as compared with $3,018,357.50 in 1926, while $2,024,586 was paid as prize money for winning horses.

The following table gives by districts, Canadian race-track betting statistics for 1927:—

District	Number of Associations	Number of Days	Amounts Wagered	Amount Retained	Prize Money
Quebec	5	70	$ 6,345,957	$ 461,449 77	$ 358,400 00
Ontario	10	140	30,373,960	2,001,896 06	1,164,600 00
Prairie Provinces	11	88	6,878,330	501,375 72	301,886 50
British Columbia	5	56	4,311,581	313,456 03	199,700 00
Canada	31	354	$ 47,915,828	$ 3,278,178 58	$ 2,034,586 50

Respectfully submitted,

W. R. MOTHERWELL,

Minister of Agriculture.

REPORT OF THE DEPARTMENT

OF

NATIONAL DEFENCE

CANADA

FOR THE

FISCAL YEAR ENDING MARCH 31

1928

(MILITIA AND AIR SERVICES)

200-7-28 (1961)
H.Q. 650-5-35

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander-in-Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the report of the Department of National Defence (Militia and Air Services), for the fiscal year ending March 31, 1928.

Respectfully submitted,

J. L. RALSTON,
Minister of National Defence.

DEPARTMENT OF NATIONAL DEFENCE,
OTTAWA, September 14, 1928.

OTTAWA, September 12, 1928.

The Honourable the Minister,
Department of National Defence,
Ottawa.

SIR,—I have the honour to submit for your consideration, to be laid on the Table of the House, this, the Annual Report of the Department of National Defence (Militia and Air Services), for the fiscal year 1927-28.

I have the honour to be, sir,

Your obedient servant,

G. J. DESBARATS,
Deputy Minister.

CONTENTS

	Page
Report of the Chief of the General Staff	5
" " the Adjutant General	44
" " the Quartermaster General	57
Report on Civil Aviation	79
Report of the Chief Accountant	81
" " the Assistant Deputy Minister	83
" " the Judge Advocate General	85
" " the Director of Contracts	87
Appendices:	
A, B—Financial Statements	89–95
C—Report of the Superintendent, Dominion Arsenal, Quebec	96

REPORT OF THE

DEPARTMENT OF NATIONAL DEFENCE, CANADA

(Militia and Air Services)

FOR THE FISCAL YEAR ENDING MARCH 31, 1928

REPORT OF THE CHIEF OF THE GENERAL STAFF

On June 1, 1927, the appointment of Chief of Staff, created on January 1, 1923, was abolished, and that of Chief of the General Staff recreated. The responsibilities of the Chief of the General Staff in connection with the Militia and Air Force are the same as those that were laid down for the Chief of Staff.

On July 1, 1927, Civil Aviation was removed entirely from the Military Branch and placed under the direct control of the Deputy Minister.

The reports of the several directorates and branches under the Chief of the General Staff are appended hereto as follows:—

(a) Militia Service

(1) Military Operations and Intelligence.
(2) Military Training and Staff Duties.
(3) Artillery.
(4) Signals.
(5) Small Arms School.
(6) Physical Training, and Cadet Services.
(7) Historical Section.

(b) Royal Canadian Air Force

(1) Military Operations and Intelligence

Operations

Questions and problems relating to defence and military policy generally have been carefully studied under the direction of the Chief of the General Staff.

The attachment, early in 1928, of a senior General Staff Officer to the Canadian Advisory Office with the League of Nations at Geneva will help to keep this Directorate up to date with regard to the continuous discussions on Disarmament, and the attitude thereto of foreign countries.

Much of the Director's time has been occupied by duties resulting from his appointment, either in the capacity of chairman, member or secretary, to numerous departmental committees or sub-committees, viz: Joint Staff, Mobilization, Censorship, Senior Supply Officers', Battle Honours, Clothing and Library, etc.

Military Intelligence

The work of collecting, collating and disseminating Military Intelligence has been continued and steady progress has been maintained. In December the duties previously performed by the Staff Officer to the Inspector-General, which have been carried out by the Assistant Director of Military Intelligence since 1922, were transferred to the Directorate of Military Training.

General

The mutual liaison established between both the Operations and Intelligence Sections and other Government departments has been uninterrupted, with distinct advantage to all concerned.

General Staff and Departmental Library

Books presented	25
Books purchased	239
Total accessions	264

An additional fifty-six volumes were ordered but remained undelivered on March 31.

Subscriptions to eighty various weekly, monthly and quarterly periodicals and eleven daily newspapers were continued. The former are circulated throughout the department, and from the latter clippings of important items are distributed to certain branches.

The binding of eighty-seven volumes of magazines was put in hand, but remained uncompleted at the end of the year.

The number of books and other documents issued on loan continues to increase. Eighty-three volumes were lent to the R.C.A.F. detachments patrolling the Hudson Bay and Strait, and applications from Military Districts have been met as far as possible.

Geographical Section, General Staff

General

Control surveys were carried out in both Quebec and Ontario, the topography being confined to Ontario only, as the air photos of the Quebec sheets, Disraeli, St. Evariste and Armstrong were not available.

The annual Course of Instruction in Surveying commenced on January 3 and ended October 31, 1927.

The total area surveyed and mapped by the Geographical Section up to March 31, 1928, was as follows:—

Area surveyed and maps published	37,347	square miles
Area fully surveyed, not mapped	1,700	"
Area partly surveyed	3,769	"
Total	42,816	"

A modern offset proving and reversing press was received too late to be available for use during the year. It will, however, prove a valuable addition to the printing plant.

Air Photos for Survey

The method devised of plotting detail from photos based on traverse control has proved extremely accurate and has resulted in considerable improvement in the survey of topographic detail. Besides the use of this standard method considerable time was spent in experimental work on other methods applicable to areas with little traverse control, namely, the radial line method and the preparation of photographic mosaics. The results of this latter work will be judged after they are tested during the approaching season's field work.

It has become evident, in order to avoid serious interference with the survey work, that air photos should be carried out at least twelve months in advance of the immediate requirements for the season's work.

During the year the Royal Canadian Air Force photographed 1,870 square miles of country for the Geographical Section of the General Staff; 220 square miles of this covered parts of the Carleton Place and Arnprior sheets, 100 square miles of part of the Barrie and Alliston sheets. The remaining 1,550 square miles covered the Beaverton and Newmarket sheets and parts of the Lindsay, Scugog and Oshawa sheets. Owing to unforeseen circumstances it was impossible to photograph the area to be covered by the Valcartier, Disraeli and St. Evariste sheets in Quebec during the field survey period, but plans have been made to complete this work early in 1928.

Field Work

Control.—Special control traverses were required in Quebec for the proposed Valcartier Camp sheet, and some additional control for the St. Evariste sheet; the greater part of the work, however, having been carried out in Ontario in the Newmarket, Scugog, Oshawa and Lindsay sheets involving a total mileage of 1,390 miles of horizontal control and 1,370 miles of vertical control.

The use of more accurate survey instruments, namely, the Wild transit and Invar tape, has resulted in very greatly increased accuracy in the control survey, more than half of the closed circuits showing closing errors of 1 in 25,000 or better. This result is remarkable and very gratifying, especially as the amount of work carried out during the season was at least as large as in former years, with the same party. Azimuth observations were made on Polaris instead of on the sun as formerly, this, no doubt, has also added to the accuracy of the results.

Topography.—The time of the topographers was very fully occupied in the winter in plotting detail from air photos for next season's field work. As this work will probably increase considerably, and as the time of the five map draughtsmen is very fully occupied, it would seem that in the near future it will be necessary to increase the number of draughtsmen, both as understudies for the present map draughtsmen, and to carry out some, at least, of the plotting from air photos.

Topography was carried out in four new sheets, namely, Perth, Carleton Place, Arnprior and Barrie, and revision of part of the Lucan and Fort Erie sheets. Total new topography 1,333 square miles, and revision 114 square miles.

Office Work

Printing:

Eight new 1″ and ½″ maps were printed, namely, Westport, St. Mary's, Stratford, Thetford, Grand Bend, Mallorytown ½″, Halifax ½″, Kingston 2″ (Training). Total maps	7,257
Eleven confidential maps, total	5,384
Reprints of 20 maps, total	11,016
One hundred and ninety-two diagrams for lecture purposes, total	41,362
Sixteen pro formas, total	2,235
Regimental badges of 20 corps, drawings and photographs, total	220
Regimental, etc. colours, total	1,526
Six miniature targets and score cards	352,134
Departmental cheques, total	206,134
Lantern slides, total	3,848
Besides the above, the following work was carried out for other Government Departments:	
Geological Survey, 2 maps, total	6,650
Geodetic Survey, 44 sheets of the map of London, photographs and 169 photo-lith. prints prepared for their Department.	
Annual Report Civil Aviation, 3 maps, total	7,650
Defence Quarterly, 3 maps, total	13,500
Maps and Diagrams issued:—	
1″ and ½″ topographic maps sold to the public	5,177
1″ and ½″ topographic maps issued free	12,235
Total	17,412

Staff

Early in December the Director proceeded to England to attend the 1928 Course at the College of Imperial Defence. The Assistant Director of Military Intelligence was appointed to succeed him as Director of Military Operations and Intelligence, and a graduate from the Staff College at Quetta, India, has been appointed as Assistant Director of Military Intelligence.

All ranks of this directorate have worked loyally and efficiently throughout the year.

(2) Military Training and Staff Duties

REMARKS

The increased allotment for 1927-28 for the Non-Permanent Active Militia made it possible to train more men than during the preceding year, but was not sufficient to extend the period of training.

With the money available it was considered that more effective training could be provided by adding to the personnel rather than by lengthening the period.

PERMANENT FORCE

With their present restricted strength effective training of Permanent Force units in their districts is very difficult. With a view to overcoming this it was decided to concentrate (as far as funds would permit) Permanent Force units at Central Camps for combined training as under:—

Petawawa Camp—1st to 31st August—

Royal Canadian Dragoons.
Royal Can. Regt. (less " A " Coy. from Halifax).
Royal 22nd Regt.

Sarcee Camp—8th to 31st August—

Lord Strathcona's Horse (R.C.).
P.P.C.L.I.

The first three weeks were devoted to Squadron, Company, Regimental and combined training which permitted Regimental and Battalion Commanders and leaders of smaller units to be exercised in their proper order.

Combined training for cavalry and infantry was carried out during the last week, and although it was necessary to resort to skeleton formations many valuable lessons were learned. The Royal Canadian Artillery at Petawawa participated in the combined exercises, in so far as their current duties of training the Non-Permanent Active Militia batteries in camp would permit.

In the case of units other than the above training was carried out locally under arrangements made by District Officers Commanding.

NON-PERMANENT ACTIVE MILITIA

Training was divided generally into unit training at local headquarters or in camp and individual training at schools and courses of instruction.

Detachments of Mobile Artillery were permitted 3 days' training at local headquarters, and 8 days at practice camp for firing detachments. The Coast Artillery was allowed 8 days at local headquarters and 4 days' practice at Forts.

In some cases camp schools not exceeding sixteen days' duration were held in lieu of unit training, the attendance being restricted principally to officers, warrant officers, non-commissioned officers, and specialists.

The following table shows the training completed by units of the Non-Permanent Active Militia during the year under review:—

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 1

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 8th Mounted Bde.	...	...	...	1	...	2
H.Q. 7th Field Bde. C.A.	...	...	...	2	...	18
12th Field Battery C.A.	(b) 5	(a) 31	108	4	31	315
55th Field Battery C.A.	(c) 7	(a) 19	78	6	33	351
H.Q. 11th Field Bde. C.A.	1	...	3	...	...	...
16th Field Battery C.A.	(a) 5	(a) 30	97	5	33	341
29th Field Battery C.A.	(a) 4	(a) 27	93	5	30	315
H.Q. 1st Div. Engrs. C.E.	8	33	303	...	...	...
1st Signal Battalion C.C. of S.	17	123	1,466	...	...	...
University of Western Ontario Cont. C.O.T.C.	15	106	1,317	...	...	...
Ontario Agricultural College C.O.T.C.	3	35	393	...	...	...
Middlesex Light Infantry	...	...	...	...	18	153
The Perth Regiment	22	152	1,375	...	...	...
The Huron Regiment	...	...	...	8	38	416
The Canadian Fusiliers (City of London Regt.)	31	182	1,935	1	...	10
The Bruce Regiment	...	...	...	16	79	844
H.Q. 2nd Infantry Bde.	1	...	3	(d) 1	...	2
The Oxford Rifles	13	110	1,072	...	...	...
The H.L.I. of Canada	31	208	2,030	...	...	...
The Wellington Rifles	...	...	...	4	36	359
The North Waterloo Regt.	26	136	1,272	5	29	132
The Elgin Regt.	30	188	1,556	...	...	...
The Lambton Regt. H.Q. "A" "B" Coys.	10	135	1,302	...	...	...
The Essex Scottish	34	277	2,504	...	...	...
The Kent Regiment	27	268	2,374	...	...	...
1st Divisional Train C.A.S.C.	5	68	639	...	...	...
No. 11 Field Ambulance	...	...	...	4	4	68
No. 15 Field Ambulance	11	42	415	...	...	...
Totals	287	2,063	20,335	61	331	3,326

(a) Included in "At Camp".
(b) 4 included in "At Camp".
(c) 6 included in "At Camp".
(d) Included in "At Local H.Q.".

MILITARY DISTRICT No. 2

H.Q. 1st Mounted Bde.	...	...	...	2	2	37
Governor General's Body Guard	8	135	1,287	14	87	935
2nd Dragoons	6	71	683	16	88	919
The Mississauga Horse	4	100	702	18	83	934
10th Brant Dragoons	(a) 13	(a) 119	264	13	119	940
H.Q. 3rd Field Bde. C.A.	(a) 2	1	9	2	...	17
9th (Toronto) Field Battery C.A.	(a) 5	(a) 33	114	6	33	329
15th Field Battery C.A.	(a) 5	(a) 32	111	6	33	327
30th Field Battery C.A.	(a) 5	(b) 57	186	6	33	329
53rd Field Battery C.A.	(a) 5	(c) 35	114	6	32	322
H.Q. 8th Field Bde. C.A.	(a) 2	(a) 1	9	2	1	27
10th (St. Catharines) Field Battery C.A.	(d) 5	(a) 33	114	3	33	319
11th (Hamilton) Field Battery C.A.	(e) 5	(a) 33	114	4	33	333
40th Field Battery C.A.	(a) 4	(b) 34	114	4	33	333
54th Field Battery C.A.	(f) 3	(g) 35	114	2	27	261
2nd Divisional Engrs. C.E.	10	36	357	...	...	...
2nd Signal Battalion C.C. of S.	23	164	1,876	...	...	...
No. 2 Cyclist Co. Corps of Guides	7	50	449	...	...	...
Toronto University Cont. C.O.T.C.	24	301	3,900	...	...	...
H.Q. 4th Infantry Bde.	2	...	18	...	...	...

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 2—*Concluded*

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
The Royal Hamilton Light Infantry	32	335	2,949	.....	.....	.....
The Dufferin Rifles of Canada	30	239	2,369	.....	.....	.....
The Wentworth Regiment	17	165	1,563	.....	.....	.....
The Argyll & Sutherland Highlanders of Canada (Princess Louise's)	32	334	3,253	.....	.....	.....
H.Q. 5th Infantry Bde	.....	.....	.....	2	2	39
The Lincoln Regiment	31	105	1,207	.....	.....	.....
The Haldimand Rifles	.....	.....	.....	14	81	882
The Norfolk Rifles	.....	22	198	7	72	722
The Lincoln & Welland Regiment	.....	.....	.....	14	89	925
H.Q. 6th Infantry Bde	2	.....	18	.....	.....	.....
The Queen's Own Rifles of Canada	60	518	4,946	.....	.....	.....
The Royal Grenadiers	30	267	2,510	.....	.....	.....
The 48th Regt. (Highlanders)	32	463	4,325	.....	.....	.....
H.Q. 14th Infantry Bde	2	.....	18	.....	.....	.....
The Irish Regiment	20	136	1,374	.....	.....	.....
The Toronto Regiment	33	320	2,730	.....	.....	.....
The Toronto Scottish Regiment	31	494	4,404	.....	.....	.....
The Queens Rangers	31	191	1,792	.....	.....	.....
H.Q. 22nd Infantry Bde	.....	.....	.....	2	2	40
The Grey Regiment	.....	.....	.....	21	83	995
The Simcoe Foresters	.....	.....	.....	27	102	1,157
The Northern Pioneers	.....	.....	.....	10	82	828
The Algonquin Rifles	.....	.....	.....	14	84	968
H.Q. 25th Infantry Bde	(a) 2	(a) 2	8	2	2	28
The York Rangers	(a) 15	(a) 125	280	15	125	980
The Peel & Dufferin Regiment	(a) 20	(h) 125	316	20	119	945
The Halton Rifles	(a) 18	(a) 107	250	18	107	846
The Ontario Regiment	14	150	1,382	.....	.....	.....
The Sault Ste. Marie Regiment	26	98	1,091	.....	.....	.....
1st Battalion C.M.G.C	30	128	1,414	.....	.....	.....
3rd Battalion C.M.G.C	31	220	2,195	.....	.....	.....
2nd Divisional Train C.A.S.C	19	43	546	1	10	121
8th Divisional Train C.A.S.C	17	18	315	.....	.....	.....
No. 2 Field Ambulance	.....	.....	.....	4	18	187
No. 5 Field Ambulance	4	23	231	6	20	215
No. 7 Cavalry Field Ambulance	4	10	123	.....	.....	.....
No. 16 Field Ambulance	4	15	161	2	17	165
No. 19 Field Ambulance	8	20	217	6	17	195
No. 2 Casualty Clearing Station	.....	.....	.....	7	46	605
No. 2 Detachment C.A.V.C	.....	.....	.....	1	.....	11
No. 2 Detachment C.A.D.C	.....	.....	.....	2	2	30
No. 2 Detachment C.P.C	.....	.....	.....	.....	1	10
Totals	628	5,214	52,720	299	1,718	17,254

(a) Included in "At Camp".
(b) 33 included in "At Camp".
(c) 32 included in "At Camp".
(d) 3 included in "At Camp".
(e) 4 included in "At Camp".
(f) 2 included in "At Camp".
(g) 27 included in "At Camp".
(h) 119 included in "At Camp".

MILITARY DISTRICT No. 3

H.Q. 2nd Mounted Bde	.....	.....	.....	2	.....	18
P.L.D. Guards	.....	.....	.....	21	103	1,124
3rd Prince of Wales Canadian Dragoons	.....	.....	.....	10	97	975
4th Hussars	.....	.....	.....	8	71	731
H.Q. 1st Field Bde. C.A	.....	.....	.....	2	1	22
1st Field Battery C.A	(a) 5	(b) 32	111	5	27	251
2nd (Ottawa) Field Battery C.A	(a) 5	(a) 25	90	5	31	286
4th Field Battery C.A	4	32	310	.....	.....	.....
22nd Medium Battery C.A	(a) 5	(a) 32	101	5	32	327

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 3—*Concluded*

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
H.Q. 9th Field Bde. C.A.	...	(a) 1	3	1	1	14
3rd (Gananoque) Field Battery, C.A.	(a) 5	(a) 26	66	5	27	187
32nd (Kingston) Field Battery C.A.	6	36	374	...	...	...
34th Field Battery C.A.	(a) 4	(a) 31	105	6	32	344
3rd Field Company C.E.	(a) 6	(c) 58	240	7	53	360
3rd Signal Battalion C.C. of S.	...	...	...	17	127	1,814
Queens University Contingent C.O.T.C.	16	96	1,194	...	...	...
H.Q. 7th Infantry Bde.	...	...	...	3	1	44
The Princess of Wales Own Regiment	18	178	1,519	...	...	...
The Argyll Light Infantry	26	174	1,809	...	...	...
Hastings and P.E. Regiment	...	...	...	13	125	1,248
The Frontenac Regiment	1	13	116	12	110	1,096
The Lanark and Renfrew Scottish Regiment	...	...	...	17	122	1,260
H.Q. 8th Infantry Bde.	...	...	...	1	...	4
The Brockville Rifles	23	171	1,164	(d) 16	(d) 114	396
The Grenville Regiment (Lisgar Rifles)	18	156	1,204	...	...	...
The Stormont, Dundas and Glengarry Highlanders	...	...	...	18	115	1,201
The Ottawa Highlanders	30	320	2,040	(d) 30	(d) 320	1,020
Le Regiment de Hull	22	166	1,692	...	...	...
The Northumberland Regt.	...	...	...	10	112	1,098
The Victoria and Haliburton Regt.	14	146	1,436	...	...	...
The Durham Regt.	...	(a) 5	30	14	110	1,082
The Peterborough Rangers	15	128	798	(d) 15	(d) 115	467
The Governor General's Foot Guards	32	269	1,782	(d) 32	(d) 269	199
4th Battalion, C.M.G.C.	15	136	943	(d) 11	(d) 81	439
3rd Divisional Train, C.A.S.C.	...	...	...	14	55	608
No. 1 Field Ambulance	...	...	...	2	29	279
No. 23 Field Ambulance	...	...	...	4	29	318
No. 3 Detachment, C.O.C.	...	...	...	1	6	91
Totals	240	2,031	17,127	203	1,416	18,023

(a) Included in "At Camp".
(b) 27 included in "At Camp".
(c) 53 included in "At Camp".
(d) Included in "At Local H.Q.".

MILITARY DISTRICT No. 4

17th Duke of York's Royal Canadian Hussars	...	...	...	16	111	1,107
The Eastern Townships Mtd. Rifles	...	...	...	17	104	1,201
24th (Shefford) Field Battery C.A.	(a) 4	(b) 28	96	5	25	270
35th Field Battery C.A. (How.)	4	34	161	...	...	...
81st Field Battery C.A.	(a) 1	(a) 16	51	1	16	153
79th Field Battery C.A.	2	23	225	...	...	...
H.Q. 2nd Field Bde. C.A.	(a) 1	(a) 1	6	1	...	7
7th Field Battery C.A.	(a) 4	(c) 42	126	4	29	281
5th Field Battery C.A.	(a) 5	(d) 40	135	7	33	340
66th Field Battery C.A.	(e) 5	(f) 38	124	4	31	293
27th Field Battery C.A.	(a) 4	(d) 40	132	4	33	311
H.Q. 2nd Medium Bde. C.A.	(g) 3	1	12	2	...	17
1st Medium Battery	(a) 5	(d) 48	159	5	33	323
3rd Medium Battery	(h) 5	(i) 39	132	3	32	298
7th Medium Battery	(a) 5	(i) 48	159	5	32	314
10th Medium Battery	(a) 5	(d) 45	150	5	33	323
H.Q. 2nd Montreal Regt. C.A.	2	1	9	...	...	...
4th Divisional Engineers	9	112	1,063	...	...	...
No. 4 Signal Company	10	67	755	...	...	...
3rd Signal Troop	1	27	266	...	...	...
No. 4 Cyclist Co. Corps of Guides	4	26	270	...	...	...
McGill University C.O.T.C.	15	109	1,488	...	...	...
Loyola College C.O.T.C.	3	81	1,008	...	...	...

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 4—*Concluded*

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
University of Bishops College C.O.T.C.	4	54	696	.....	.....	.....
L'Université de Montreal C.O.T.C.	9	118	1,524	.....	.....	.....
The Sherbrooke Regt.	19	158	1,584	.....	.....	.....
Les Carabiniers de Sherbrooke	29	170	1,737	.....	.....	.....
Le Regiment de St. Hyacinthe	20	157	1,489	.....	.....	.....
H.Q. 11th Infantry Brigade	.....	.....	.....	2	.....	5
Le Regiment de Chateauguay	.....	.....	.....	17	152	1,541
Les Carabiniers Mont Royal	31	389	3,780	.....	.....	.....
Le Regiment de Joliette	.....	.....	.....	23	163	1,699
The Three Rivers Regt.	17	97	917	.....	.....	.....
Le Regiment de Maisonneuve	33	360	3,537	.....	.....	.....
The Victoria Rifles of Canada	33	327	3,013	.....	.....	.....
The Royal Highlanders of Canada	71	765	7,431	.....	.....	.....
The Royal Montreal Regt.	30	222	2,268	.....	.....	.....
The Canadian Grenadier Guards	31	376	3,663	.....	.....	.....
1st Motor Machine Gun Bde	20	103	590	(j) 19	(j) 29	144
8th Battalion C.M.G.C.	8	53	412	6	36	126
4th Divisional Train, C.A.S.C.	17	78	832	4	19	360
No. 6 Field Ambulance	4	20	206	.....	.....	.....
No. 9 Field Ambulance	2	22	210	.....	.....	.....
No. 4 Section, C.A.V.C.	1	17	162	.....	.....	.....
Totals	433	4,054	40,578	131	882	9,113

(*a*) Included in "At Camp".
(*b*) 25 Included in "At Camp".
(*c*) 29 Included in "At Camp".
(*d*) 33 Included in "At Camp".
(*e*) 4 Included in "At Camp".
(*f*) 31 Included in "At Camp".
(*g*) 2 Included in "At Camp".
(*h*) 3 Included in "At Camp".
(*i*) 32 Included in "At Camp".
(*j*) Included in "At Camp".

MILITARY DISTRICT No. 5

7th Hussars	.....	.....	.....	17	86	953
11th Hussars	.....	.....	.....	15	81	883
57th Field Battery C.A.	(a) 5	(b) 45	150	7	33	359
H.Q. 6th Coast Bde. C.A.	(c) 4	(d) 2	24	3	1	40
57th Heavy Battery C.A.	(e) 5	(f) 44	172	4	35	380
58th Heavy Battery C.A.	(e) 5	(f) 42	184	4	35	390
59th Heavy Battery C.A.	(e) 5	(b) 48	180	4	33	370
H.Q. 5th Divisional Engineers	8	48	475	.....	.....	.....
H.Q. 5th Signal Battalion C.C. of S.	24	134	1,826	.....	.....	.....
Laval University, C.O.T.C.	4	46	524	.....	.....	.....
Fusiliers du St. Laurent	.....	.....	.....	20	194	1,966
Le Regiment de Lévis	24	165	1,703	.....	.....	.....
The Royal Rifles of Canada	25	175	1,714	.....	.....	.....
Les Voltigeurs de Quebec	31	294	2,851	.....	.....	.....
Le Regiment de Quebec	32	166	1,747	.....	.....	.....
No. 25 Field Ambulance	5	34	345	.....	.....	.....
No. 30 Field Ambulance	4	30	238	.....	.....	.....
Totals	161	1,136	12,133	74	498	5,341

(*a*) Included in "At Camp".
(*b*) 33 included in "At Camp".
(*c*) 3 included in "At Camp".
(*d*) 1 included in "At Camp".
(*e*) 4 included in "At Camp".
(*f*) 35 included in "At Camp".

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 6

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
King's Canadian Hussars				18	82	914
The P.E.I. Light Horse				16	70	790
H.Q. 14th Field Bde. C.A.	(a) 2		4	2		24
52nd. Field Battery	(a) 1	(a) 27	84	4	30	388
84th Field Battery (How)	(a) 2	(a) 33	105	2	33	420
87th Field Battery C.A.	(a) 5	(a) 33	114	6	33	468
H.Q. 16th Field Bde	(b) 2	(a) 1	9	1	1	24
6th (Sydney) Field Battery C.A.	(a) 4	(a) 33	111	5	33	452
86th Field Battery C.A.	(c) 5	(a) 30	105	4	31	420
36th Field Battery (How.) C.A.	(a) 5	(a) 33	114	5	33	456
1st. P.E.I. Medium Bde				2	1	41
2nd Medium Battery (How.) C.A.				5	33	444
8th Medium Battery (How.) C.A.				5	33	731
1st Halifax Coast Bde. C.A.	22	88	816	(d) 22	(d) 88	408
9th Heavy Battery C.A.	(e) 6	(a) 33	117	5	33	452
10th Fortress Company C.E.	4	53	580			
6th Signal Battalion C.C. of S.				1	1	18
No. 8 Signal Company				7	52	730
No. 7 (Fortress) Signal Company	(a) 2	(f) 31	99	2	26	249
Nova Scotia Technical College Cont. C.O.T.C.	3	57	714			
The Lunenburg Regt				18	116	1,215
The Annapolis Regt				18	108	1,137
The Colchester & Hants Regiment				23	118	1,273
The Halifax Rifles	21	116	1,025	1	1	18
The Princess Louise Fusiliers	16	111	1,037			
H.Q. 18th Infantry Bde				1		12
The Pictou Highlanders				15	124	1,261
The Cumberland Highlanders				17	114	1,185
The Cape Breton Highlanders				14	108	1,171
The P.E.I. Highlanders				19	106	1,143
H.Q. 6th Battalion, C.M.G.C.				15	75	813
No. 22 Field Ambulance				5	34	360
No. 26 Field Ambulance				5	36	384
No. 6 Detachment, C.P.C.					1	10
Totals	69	430	5,034	241	1,466	17,411

(a) Included in "At Camp".
(b) 1 included in "At Camp".
(c) 4 included in "At Camp".
(d) included in "At Local H.Q.".
(e) 5 included in "At Camp".
(f) 26 included in "At Camp".

MILITARY DISTRICT No. 7

8th Princess Louise's N.B. Hussars				20	73	854
The N.B. Dragoons				17	75	830
H.Q. 12th Field Brigade C.A.	(a) 2	(a) 1	9	2	1	33
8th Field Battery C.A.	(a) 5	(a) 33	114	5	35	431
28th (Newcastle) Field Battery	(b) 5	(a) 33	114	4	33	403
89th (Woodstock) Field Battery	(a) 5	(a) 33	114	5	33	453
H.Q. 3rd N.B. Medium Bde. C.A.	(a) 2	(a) 1	9	2	1	31
4th Medium Battery (How.)	(c) 6	(d) 33	117	5	32	404
6th Medium Battery (How.)	(a) 6	(d) 33	117	6	32	413
15th Medium Battery	(c) 6	(a) 33	117	5	33	413
6th Signal Battalion C.C. of S.				7	60	662
No. 7 Cyclist Co. Corps of Guides				3	4	60
University of New Brunswick Contingent C.O.T.C.	6	127	1,281			
H. Q. 16th Infantry Bde				2	1	27
The Carleton Light Infantry				14	86	908
The York Regiment				20	82	884
The North Shore (N.B.) Regt				19	89	977
The New Brunswick Rangers				15	87	923

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 7—*Concluded*

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
The St. John Fusiliers	28	165	1,478	.....	.....	.....
7th Battalion, C.M.G.C.	32	83	928	.....	.....	.....
6th Divisional Train C.A.S.C.	.....	.....	.....	2	21	225
No. 14 Field Ambulance	.....	.....	.....	2	12	126
No. 7 Section C.A.V.C.	.....	.....	.....	1	.....	10
Sussex Camp Staff	.....	.....	.....	.....	21	205
Total	69	377	4,398	156	811	9,272

(*a*) Included in "At Camp".
(*b*) 4 included in "At Camp".
(*c*) 5 included in "At Camp".
(*d*) 32 included in "At Camp".

MILITARY DISTRICT No. 10

H.Q. 6th Mounted Bde.	.....	.....	.....	3	.....	30
The Fort Garry Horse	.....	.....	.....	11	135	1,502
The Manitoba Horse	.....	.....	.....	6	70	763
12th Manitoba Dragoons	.....	.....	.....	11	107	1,145
The Border Horse	.....	.....	.....	7	77	824
The Manitoba Mounted Rifles	.....	.....	.....	13	107	1,175
H.Q. 5th Field Bde. C.A.	(*a*) 2	(*a*) 1	9	2	1	24
13th (Winnipeg) Field Battery C.A.	(*a*) 5	(*a*) 27	96	5	33	304
17th Field Battery C.A.	(*a*) 4	(*a*) 13	51	5	33	295
19th Field Battery C.A.	(*a*) 5	(*a*) 24	87	5	32	293
38th Field Battery (How.) C.A.	(*a*) 4	(*a*) 27	59	4	32	285
5th Field Amm. Col. C.A.	1	19	167	.....	.....	.....
11th Medium Battery (How.) C.A.	.....	.....	.....	8	37	267
59th Field Battery C.A.	5	33	284	2	.....	12
12th Field Company, C.E.	2	4	54	.....	.....	.....
H.Q. 10th Signal Battalion, C.C. of S.	7	19	312	5	53	696
No. 17 Signal Company	6	48	648	.....	.....	.....
Manitoba University C.O.T.C.	23	151	1,732	.....	.....	.....
H.Q. 20th Infantry Bde.	2	1	27	.....	.....	.....
The Winnipeg Rifles	25	171	1,854	.....	.....	.....
The Winnipeg Grenadiers	25	170	1,679	.....	.....	.....
The Queen's Own Cameron Highlanders of Canada	19	156	1,572	.....	.....	.....
The Winnipeg Light Infantry	21	179	1,685	.....	.....	.....
The Lake Superior Regiment	23	151	1,566	.....	.....	.....
The Kenora Light Infantry	13	103	923	.....	.....	.....
The Manitoba Rangers	18	152	1,500	.....	.....	.....
1st Cavalry Machine Gun Squadron	6	51	513	.....	.....	.....
2nd Motor Machine Gun Brigade	11	39	450	.....	.....	.....
10th Battalion, C.M.G.C.	24	96	1,034	.....	.....	.....
10th Divisional Train C.A.S.C.	5	20	204	.....	10	186
No. 3 Field Ambulance	5	34	300	.....	.....	.....
No. 4 Field Ambulance	6	30	324	.....	.....	.....
No. 21 Cavalry Field Ambulance	.....	.....	.....	.....	1	10
No. 10 Section C.A.V.C.	.....	.....	.....	.....	5	50
Totals	247	1,627	17,130	87	733	7,861

(*a*) Included in "At Camp".

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 11

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
5th B.C. Light Horse	.....	.....	.....	16	109	1,210
The B.C. Mounted Rifles	.....	.....	.....	16	107	1,296
H.Q. 15th Field Bde. C.A.	(a) 2	(a) 1	9	2	1	32
31st Field Battery C.A.	(a) 3	(a) 30	99	5	33	392
68th Field Battery C.A.	(a) 5	(b) 36	123	5	33	399
85th Field Battery (How.) C.A.	(a) 5	(b) 36	123	5	33	399
5th Medium Battery C.A.	(c) 6	(b) 35	121	5	33	399
H.Q. 5th (B.C.) Coast Bde C.A.	(d) 3	(e) 2	40	2	1	12
55th Heavy Battery C.A.	(f) 5	(g) 40	360	4	36	162
56th Heavy Battery C.A.	(f) 5	(g) 38	344	4	36	202
2nd Anti-Aircraft Section C.A.	(a) 3	(h) 18	168	3	17	100
58th Field Battery C.A.	(a) 4	(a) 31	105	5	33	418
12th Heavy Battery (How.) C.A.	(a) 2	(a) 11	39	2	18	220
H.Q. 11th District Engrs. C.E.	3	.....	27	.....	.....	.....
6th Field Coy. C.E.	6	61	564	.....	.....	.....
No. 21 Signal Coy.	4	24	172	.....	.....	.....
11th Fortress Sig. Coy.	1	24	200	1	24	100
H.Q. 23rd Infantry Bde.	2	1	27	.....	.....	.....
1st B.C. Regt.	22	83	813	(i) 11	(i) 47	108
The Vancouver Regt.	18	105	923	(i) 15	(i) 51	132
The Westminster Regt.	18	107	902	(i) 11	(i) 27	76
The Seaforth Highlanders of Canada	25	190	1,611	(i) 13	(i) 83	192
The Irish Fusiliers of Canada	19	90	844	(i) 13	(i) 47	120
The Rocky Mountain Rangers	12	117	1,117	.....	.....	.....
The North B.C. Regt.	11	74	517	(i) 11	(i) 51	248
The Canadian Scottish Regt.	22	216	1,426	(i) 21	(i) 207	702
H.Q. 11th Battalion C.M.G.C.	22	108	1,111	.....	.....	.....
11th Divisional Train C.A.S.C.	6	34	338	.....	.....	.....
No. 18 Field Ambulance	4	16	172	.....	.....	.....
Totals	199	1,266	12,295	75	490	6,919

(a) Included in "At Camp".
(b) 33 included in "At Camp".
(c) 5 included in "At Camp".
(d) 2 included in "At Camp".
(e) 1 included in "At Camp".
(f) 4 included in "At Camp".
(g) 36 included in "At Camp".
(h) 17 included in "At Camp".
(i) included in "At Local H.Q.".

MILITARY DISTRICT No. 12

H.Q. 7th Mounted Bde.	.....	.....	.....	1	.....	3
14th Canadian Light Horse	.....	.....	.....	19	123	1,423
16th Canadian Light Horse	.....	.....	.....	18	122	1,281
18th Canadian Light Horse	.....	.....	.....	12	61	787
The Saskatchewan Mounted Rifles	.....	.....	.....	18	90	1,101
18th Field Battery, C.A.	3	6	80	.....	.....	.....
77th Field Battery C.A.	(a) 4	(b) 51	129	2	25	230
H.Q. 17th Field Bde. C.A.	.....	.....	.....	1	.....	9
21st Field Battery (How.) C.A.	(c) 5	(d) 49	162	4	32	312
44th Field Battery, C.A.	(e) 3	(f) 15	54	4	14	156
3rd Field Troop C.E.	2	18	180	.....	.....	.....
14th Field Company C.E.	4	25	257	.....	.....	.....
12th Signal Battalion C.C. of S.	7	60	757	12	96	1,061
Saskatchewan University C.O.T.C.	12	119	1,572	.....	.....	.....
19th Infantry Bde.	1	.....	2	.....	.....	.....
The King's Own Rifles of Canada	23	129	1,299	.....	.....	.....
The Regina Rifle Regiment	11	154	1,454	.....	.....	.....
The Weyburn Regiment	.....	.....	.....	9	55	607
The Assiniboia Regiment	.....	.....	.....	11	104	1,047
The Saskatchewan Border Regiment	.....	.....	.....	7	44	490
The Saskatoon Light Infantry	14	93	963	.....	.....	.....
The Prince Albert Volunteers	.....	.....	.....	20	122	1,300
The Yorkton Regiment	.....	.....	.....	16	112	1,180

NON-PERMANENT ACTIVE MILITIA TRAINING, 1927-28

MILITARY DISTRICT No. 12—*Concluded*

Unit	Numbers Trained					
	At Local Headquarters			At Camp		
	Officers	Other Ranks	Men Days	Officers	Other Ranks	Men Days
The Battleford Light Infantry	.....	.....	.....	13	112	1,068
H.Q. 12th Battalion, C.M.G.C.	2	1	27	.....	.....	.....
No. 1 Coy	3	49	448	.....	.....	.....
No. 2 Coy	5	35	307	.....	.....	.....
No. 3 Coy	.....	.....	.....	3	29	291
12th Divisional Train C.A.S.C.	6	16	192	1	5	84
No. 10 Field Ambulance	4	27	279	.....	.....	.....
No. 32 Field Ambulance	1	10	55	.....	.....	.....
Totals	101	787	8,217	171	1,145	12,430

(*a*) 2 included in "At Camp".
(*b*) 25 included in "At Camp".
(*c*) 4 included in "At Camp".
(*d*) 31 included in "At Camp".
(*e*) Included in "At Camp".
(*f*) 14 included in "At Camp".

MILITARY DISTRICT No. 13

H.Q. 5th Mounted Bde.	.....	.....	.....	6	2	72
15th Canadian Light Horse	.....	.....	.....	14	140	1,396
19th Alberta Dragoons	.....	.....	.....	15	121	1,224
The Alberta Mounted Rifles	.....	.....	.....	11	81	848
H.Q. 18th Field Bde. C.A.	.....	.....	.....	3	.....	24
20th Field Battery C.A.	.....	.....	.....	5	33	299
93rd Field Battery (How.) C.A.	(*a*) 2	(*b*) 20	62	2	15	136
H.Q. 19th Field Bde. C.A.	.....	.....	.....	1	1	16
22nd Field Battery C.A.	(*a*) 5	(*c*) 33	114	5	31	288
23rd Field Battery (How.) C.A.	4	23	239	.....	.....	.....
91st Field Battery C.A.	(*a*) 3	(*d*) 33	108	4	32	278
H.Q. 20th Field Bde. C.A.	5	33	114	2	1	21
61st Field Battery C.A.	(*a*) 5	(*e*) 34	117	5	33	300
78th Field Battery C.A.	(*a*) 5	(*a*) 32	111	5	32	296
92nd Field Battery (How.) C.A.	(*a*) 5	(*a*) 33	114	5	33	295
H.Q. 13th District Engineers	1	.....	9	.....	.....	.....
4th Field Troop C.E.	4	18	178	.....	.....	.....
13th Field Coy. C.E.	4	15	108	(*f*) 5	(*g*) 11	64
H.Q. 13th Signal Battalion C.C. of S.	2	1	36	.....	.....	.....
No. 13 Signal Coy	6	33	410	.....	.....	.....
No. 22 Signal Coy	(*h*) 7	(*i*) 23	90	6	12	178
Alberta University, C.O.T.C.	19	251	3,135	.....	.....	.....
H.Q. 24th Infantry Bde.	2	.....	18	.....	.....	.....
The Calgary Highlanders	25	83	855	.....	.....	.....
The Calgary Regiment	28	114	1,165	.....	.....	.....
The South Alberta Regiment	10	68	689	.....	.....	.....
H.Q. 29th Infantry Bde.	.....	.....	.....	3	.....	27
The Edmonton Regt.	.....	.....	.....	7	56	597
The Edmonton Fusiliers	.....	22	198	9	106	1,057
H.Q. 13th Battalion, C.M.G.C.	3	.....	27	.....	.....	.....
No. 1 Company	4	14	137	.....	.....	.....
No. 2 Company	7	13	173	.....	.....	.....
No. 3 Company	5	23	246	.....	.....	.....
13th Divisional Train C.A.S.C.	4	10	106	1	.....	9
No. 8 Field Ambulance	5	28	240	.....	.....	.....
No. 17 Cavalry Field Ambulance	.....	.....	.....	3	29	286
Totals	139	769	8,799	113	758	7,711

(*a*) Included in "At Camp".
(*b*) 15 included in "At Camp".
(*c*) 31 included in "At Camp".
(*d*) 32 included in "At Camp".
(*e*) 33 included in "At Camp".
(*f*) 4 included in "At Local H.Q.".
(*g*) Included in "At Local H.Q.".
(*h*) 6 included in "At Camp".
(*i*) 12 included in "At Camp".

RECAPITULATION

Military district	Numbers trained at public expense						Numbers trained without public expense		Remarks
	At local headquarters			At camp			At local head-quarters	At camp	
	Officers	Other ranks	Men days	Officers	Other ranks	Men days			
No. 1	287	2,063	20,335	61	331	3,326	259	1	
No. 2	628	5,214	52,720	299	1,718	17,254	1,719	.....	
No. 3	240	2,031	17,127	203	1,416	18,023	.....	.....	
No. 4	433	4,054	40,578	131	882	9,113	43	.....	
No. 5	161	1,136	12,133	74	498	5,341	.....	.....	
No. 6	69	430	5,034	241	1,466	17,411	2	1	(*) 7 all ranks also carried out annual training with their unit.
No. 7	69	377	4,398	156	811	9,272	.....	18(*)	
No. 10	247	1,627	17,130	87	733	7,861	1,131	79	
No. 11	199	1,266	12,295	74	490	6,919	375	.....	
No. 12	101	787	8,217	171	1,145	12,430	.....	.....	
No. 13	139	769	8,799	113	758	7,711	.....	.....	
Total	2,573	19,754	198,766	1,610	10,248	114,661	3,529	99	

Total number trained at public expense 4,183 officers, 30,002 other ranks or 34,185 all ranks for 313,427 men-days.
Total without public expense 3,628 all ranks.

SCHOOLS OF INSTRUCTION

Remarks.—An increase in the program for Schools of Instruction work was not possible with the funds available and, therefore, the instructional work for this year was based on that which obtained in 1926-27. The results obtained were as satisfactory as could be expected under the circumstances.

Warrant Officers and Non-Commissioned Officers of the Permanent Force maintained for the instruction of the Non-Permanent Active Militia again worked very hard and acquitted themselves with credit and with satisfactory results. Unfortunately the strength of this Cadre is too limited to meet adequately the heavy demands made upon it for instructional work.

Again this year resort was had to correspondence courses as a means of relieving the pressure on other forms of instruction and providing a means of partially qualifying for personnel of the Non-Permanent Active Militia, whose occupations prevented them from attending the regular courses.

Special Courses.—Courses for both Permanent and Non-Permanent Active Militia were held and attended as shown below.

COURSES ABROAD

Permanent Force—

Imperial Defence College

Colonel-on-Staff (Hon. Brig.-Gen.) A. G. L. McNaughton, C.M.G., D.S.O., General List, December, 1926, to December, 1927.

Colonel (Temp. Colonel-on-Staff) J. S. Brown, C.M.G., D.S.O., R.C.A., January, 1928, to January, 1929.

Staff College, Camberley

Major K. Stuart, D.S.O., M.C., R.C.E., January, 1926, to December, 1927.

Captain K. C. Burness, M.C., P.P.C.L.I., January, 1926, to December, 1927.

Captain F. C. Hanington, M.C., R.C.A., January, 1927, to December, 1928.

Major P. Earnshaw, D.S.O., M.C., R.C.C.S., January, 1927, to December, 1928.

Captain R. O. G. Morton, R.C.A., January, 1928, to December, 1929.

Lieut. (bvt. Captain) R. G. Whitelaw, R.C.R., January, 1928, to December, 1929.

Staff College, Quetta

Major F. R. Henshaw, M.C., R.C.E., February, 1926, to December, 1927.

Captain (bvt. Major) L. M. Hughes, R.C.A., February, 1927, to December, 1928.

Major E. L. M. Burns, M.C., R.C.E., February, 1928, to December, 1929.

Senior Officers' School

Major (bvt. Lt.-Col.) G. G. Bacon, R.C.A., May, 1927, to July, 1927.

Major (bvt. Lt.-Col.) P. de L. D. Passy, R.C.E., September, 1927, to December, 1927.

Major (bvt. Lt.-Col.) L. F. Page, D.S.O., L.S.H. (R.C.), January, 1928, to April, 1928.

R.A.F. Medical Board

Major R. M. Luton, M.C., R.C.A.M.C., November, 1926, to August, 1927.

Major G. W. Treleaven, D.S.O., M.C., R.C.A.M.C., November, 1927, to July, 1928.

Ordnance Officers' Course

Lieutenant H. S. Kirby, R.C.O.C., February, 1927, to December, 1927.

Gunnery Staff Course

Captain W. C. Thackray, R.C.A., September, 1926, to August, 1927.

Captain G. A. McCarter, R.C.A., September, 1926, to August, 1927.

Captain H. O. N. Brownfield, M.C., R.C.A., September, 1927, to August, 1928.

Captain D. R. Agnew, R.C.A., September, 1927, to August, 1928.

School of Military Engineering

Lieutenant W. E. Andrews, R.C.E., August, 1927, to March, 1929.

Lieutenant C. Vokes, R.C.E., August, 1927, to March, 1929.

Advanced Class, Military College of Science

Major J. H. MacQueen, R.C.O.C., November, 1925, to April, 1928.

Physical Training

Lieutenant (bvt. Captain) R. F. L. Keller, P.P.C.L.I., April, 1927, to June, 1928.

Small Arms School and Small Arms Technical Short Course

Captain G. W. De la P. Beresford, R.C.R., April, 1927, to October, 1927.

Junior Officers' Course, R.A.S.C. College

Lieutenant G. E. R. Smith, R.C.A.S.C., March, 1928, to April, 1930.

Chemical Warfare School

Lieutenant (bvt. Captain) R. M. Black, M.C., P.P.C.L.I., May, 1927, to August, 1927.

No. 12804, S.M.I. (W.O.I.), E. J. Simon, R.C.R., May, 1927, to August, 1927.

Attachments and Exchanges

Colonel-on-Staff (Hon. Brig.-General) A. G. L. McNaughton, C.M.G., D.S.O., General List, January, 1928, to April, 1928.

Captain (bvt. Major) L. C. Goodeve, D.S.O., R.C.A., April, 1927, to April, 1929.

Captain N. A. Gianelli, L.S.H. (R.C.), December, 1926, to November, 1928.

Captain C. R. S. Stein, R.C.E., October, 1926, to September, 1928.

Captain (bvt. Major) J. E. H. Tidswell, R.C.A.S.C., October, 1926, to September, 1928.

Lieut.-Colonel W. H. Robinson, O.B.E., R.C.A.S.C., April, 1927, to July, 1928.

Colonel Count H. R. V. de Bury and de Bocarme, C.B.E., R.C.O.C., June, 1927, to July, 1927.

Lieut.-Colonel (bvt. Colonel) J. T. Clarke, C.B.E., R.C.A.M.C., October, 1927, to April, 1928.

Major R. M. Luton, M.C., R.C.A.M.C., September, 1927, to December, 1927.

Major P. de L. D. Passy, R.C.E., August, 1927, to September, 1927.

Lieut.-Colonel W. K. Walker, D.S.O., M.C., C.S.A.S., December, 1927, 10 days.

Armament Artificers' Course

No. 34860, Armt. S/Sergt. E. Appleyard, R.C.O.C., October, 1926, to September, 1927.

COURSES IN CANADA

Staff College Preparatory Course

A course for officers preparing for the examinations for admission to the Staff Colleges at Camberley and Quetta was held at the Royal Military College, Kingston, from October 1, 1927, to February 28, 1928. This course was attended by five officers all of whom competed at the examination for the three vacancies allotted to Canada. In addition two officers of the Permanent Force attended as a Refresher Course, and one officer of the Royal Canadian Air Force attended for instruction until the end of December, 1927.

Long Course

The Long Course was held at the Royal Military College, Kingston, from February to June, 1928. This course, designed to qualify candidates for commissions in the Permanent Force, was attended by two candidates.

Refresher Course

In conjunction with the Long Course a Refresher Course was held for junior officers of the Permanent Force which was attended by two officers of the Royal Canadian Corps of Signals.

Artillery Staff Course

This course which commenced in October, 1926, concluded in November, 1927. It was attended by one officer and eight non-commissioned officers. For various reasons 4 N.C.Os. were recalled to regimental duty, of the remainder 1 officer and 2 N.C.Os. passed.

Master Gunners Course.

This course commenced in January, 1928, and concludes in May, 1928, and has an attendance of three non-commissioned officers.

The Royal Canadian School of Military Engineering

Courses for Field Works Instructors and Military Foremen of Works were held for personnel of the Royal Canadian Engineers. A total of 16 non-commissioned officers attended.

Signal and Small Arms Courses

See under "Signal Training" (page 30) and "Small Arms Training" (page 33) respectively.

Militia Staff Course

The Militia Staff Course is designed to train officers of the Non-Permanent Active Militia for employment in the more senior appointments on the Staff of Formations in the Field.

The practical portion of the fifth post-war course of twelve days duration was held at Lennoxville, P.Q., for candidates from Eastern Canada and at Sarcee Camp for candidates from Western Canada during the summer of 1927, 46 officers qualified at the former and 26 at the latter.

The Theoretical Portion of the sixth post-war course, which consists of a series of lectures, was carried out in the several districts during the winter months. 178 officers attended the written examination and many others attended the lectures from time to time.

Royal Canadian Army Service Corps School of Instruction, Winnipeg

A special course for Royal Canadian Army Service Corps personnel was held at the above school from 9th January to 15th April, 1928, at which 4 officers and 24 other ranks attended.

Royal Canadian Ordnance Corps School of Instruction, Winnipeg

A course for N.C.Os. of the Royal Canadian Ordnance Corps was held at the above school from 23rd January to 23rd April, 1928, at which 10 candidates attended.

A course for Caretakers—Military and Civilian, was also held at the Royal Canadian Ordnance Corps School of Instruction, Winnipeg, at which 7 candidates attended.

Examination for Promotion to Rank of Colonel, Non-Permanent Active Militia

A special practical examination of three days duration was held immediately following the Practical Portion of the Militia Staff Course at Lennoxville, P.Q., and Sarcee Camp, in order to qualify Lieutenant-Colonels of the Non-Permanent Active Militia for promotion to the rank of Colonel. 35 candidates attended the examination at Lennoxville of whom 33 were successful. 7 candidates attended at Sarcee Camp and all were successful.

Qualifying and Specialists Courses

These courses were held for the personnel of the Non-Permanent Active Militia at Royal and Permanent Schools as follows:—

(For Signals and Small Arms see under reports of these respective branches)

District	Schools	Dates		Number attending	
		From	To	Officers	Other Ranks
2	Royal Canadian School of Cavalry, Toronto.....	10-10-27	3-12-27	15	27
		30- 1-28	24- 3-28	15	27
4	" " " St. Johns.....	10-10-27	3-12-27	13	3
		30- 1-28	10- 3-28	10	9
10	" " " Winnipeg.....	10-10-27	3-12-27	7	3
		30- 1-28	24- 3-28	28	36
13	" " " Calgary.....	10-10-27	3-12-27	2	1
		30- 1-28	10- 3-28	5	59
3	Royal Canadian School of Artillery, Kingston.....	10-10-27	3-12-27	6	6
		9- 1-28	4- 3-28	8	30
		28- 3-28	7- 4-28	9	3
6	" " " Halifax.....	10-10-27	4-12-27	.....	3
10	" " " Winnipeg.....	10-10-27	4-12-27	2	3
		9- 1-28	14- 3-28	8	16
		30- 3-28	7- 4-28	1	.....
6	Royal Canadian School of Military Engineering, Halifax.....	7-7-27	1- 9-27	1	2
		12- 1-28	9- 3-28	.....	2
11	Royal Canadian School of Military engineering, Esquimalt.....	26- 2-28	7- 3-28	2	3
1	Royal Canadian School of Infantry and Machine Guns, London—				
	Infantry.....	10-10-27	19-11-27	11	.....
	"	30- 1-28	10- 3-28	22	10

District	Schools	Dates		Number attending	
		From	To	Officers	Other Ranks
2	Royal Canadian School of Infantry and Machine Guns, Toronto—				
	Infantry	10-10-27	19-11-27	15	5
	"	30- 1-28	10- 3-28	38	79
	Machine Guns	13- 5-27	13- 5-27	4	.....
	"	10-10-27	19-11-27	8	2
	"	30- 1-28	10- 3-28	7	4
4	Royal Canadian School of Infantry, St. Johns, P.Q.-				
	Infantry	17-10-27	26-11-27	1	4
	"	30- 1-28	10- 3-28	5	8
5	Royal Canadian School of Infantry and Machine Guns, Quebec—				
	Infantry	10-10-27	19-11-27	5	9
	"	30- 1-28	10- 3-28	17	16
6	Royal Canadian School of Infantry and Machine Guns, Halifax—				
	Infantry	10-10-27	19-11-27	16	8
	"	30- 1-28	10- 3-28	22	1
	Machine Guns	10-10-27	19-11-27	9	2
	"	30- 1-28	10- 3-28	20	.....
10	Royal Canadian School of Infantry and Machine Guns, Winnipeg—				
	Infantry	10-10-27	19-11-27	10	6
	"	30- 1-28	10- 3-28	26	31
	Machine Guns	7-11-27	19-11-27	1	.....
	"	30- 1-28	10- 3-28	3	7
11	Royal Canadian School of Infantry and Machine Guns, Esquimalt—				
	Infantry	10-10-27	19-11-27	3	6
	"	30- 1-28	10- 3-28	37	69
	Machine Guns	30- 1-28	10- 3-28	4	7
1	R.C.A.S.C. School of Instruction, London	10-10-27	19-11-27	8	.....
		30-1 -28	10- 3-28	11	1
6	R.C.A.S.C. School of Instruction, Halifax	16- 5-27	19- 6-27	.....	9
		10-10-27	19-11-27	1	7
		30- 1-28	10- 3-28	.....	4
10	R.C.A.S.C. School of Instruction, Winnipeg	30-10-27	19-11-27	2	1
		20- 2-28	10- 3-28	1	.....
	Artillery Caretakers' Course—				
	Kingston, Ont	23- 1-28	18- 2-28	.....	9
	Halifax, N.S	16- 1-28	11- 3-28	.....	3
	Winnipeg, Man	16- 1-28	11- 3-28	.....	7
	Esquimalt, B.C	16- 1-28	11- 3-28	.....	2
6	Royal Canadian School of Military Engineering, Halifax	7-7-27	1- 9-27	1	2
		12- 1-28	9- 3-28	.....	2
11	Royal Canadian School of Military Engineering, Esquimalt	26- 2-28	7- 3-28	2	3
1	Royal Canadian School of Infantry, London	10-10-27	19-11-27	11	.....
		30- 1-28	10- 3-28	22	10
2	" " " Toronto	10-10-27	19-11-27	15	5
		30- 1-28	10- 3-28	38	79
4	" " " St. Johns, P.Q.	17-10-28	26-11-27	1	4
		30- 1-28	10- 3-28	5	8
5	" " " Quebec	10-10-27	19-11-27	5	9
		30- 1-28	10- 3-28	17	16
6	" " " Halifax	10-10-27	19-11-27	16	8
		30-1- 28	10- 3-28	22	1
10	" " " Winnipeg	10-10-27	19-11-27	10	6
		30- 1-28	10- 3-28	26	31
11	" " " Esquimalt	10- 10-27	19-11-27	3	6
		30- 1-28	10- 3-28	37	69
2	Royal Canadian School of Machine Guns, Toronto	13- 5-27	13- 5-27	4	.....
		10-10-27	19-11-27	8	2
		30- 1-28	10- 3-28	7	4
6	" " " Halifax	10-10-27	19-11-27	9	2
		30- 1-28	10- 3-28	20	.....
10	" " " Winnipeg	7-11-27	19-11-27	1	.....
		30- 1-28	10- 3-28	3	7
11	" " " Esquimalt	30- 1-28	10- 3-28	4	7
1	R.C.A.S.C. School of Instruction, London	10-10-27	19 11-27	8	.....
		30- 1-28	10- 3-28	11	1
6	" " " Halifax	16- 5-27	19- 6-27	.....	9
		10-10-27	19-11-27	1	7
		30- 1-28	10- 3-28	.....	4
10	" " " Winnipeg	30-10-27	19-11-27	2	1
		20- 2-28	10- 3-28	1	.....
10	R.C.O.C. School of Instruction, Winnipeg	16- 1-28	11- 3-28	.....	7

In addition to the above the Provisional Schools conducted for the various arms were:—

District	Arm	Number of Schools	Average number attending	
			Officers	Other Ranks
1	Cavalry	2	13	15
2	"	3	18	53
3	"	2	14	30
4	"	2	17	.....
5	"	1	7	7
10	"	2	12	48
11	"	1	17	.....
1	Artillery	2	16	18
2	"	2	24	35
4	"	2	11	25
6	"	4	15	33
7	"	1	7	4
10	"	1	5	8
11	"	3	14	36
12	"	2	4	6
13	"	1	8	20
1	Engineers	1	5	14
4	"	1	6	16
5	"	1	7	6
1	Infantry	8	70	101
2	"	13	119	255
3	"	6	41	76
4	"	5	41	35
5	"	1	7	6
6	"	1	11	5
7	"	5	29	19
10	"	2	18	23
11	"	5	44	86
12	"	6	23	48
13	"	2	37	41
1	Machine Guns	3	19	9
2	"	2	11	18
3	"	1	4	4
4	"	1	3	5
7	"	1	5	8
10	"	2	15	.....
11	"	1	3	12
1	Canadian Army Service Corps	3	12	15
2	" " "	1	12	17
4	" " "	2	6	11
5	" " "	1	7	8
10	" " "	1	1	.....
13	" " "	1	1	7
2	Canadian Army Medical Corps	2	22	44
5	" " "	1	6	13
6	" " " (Nursing Sisters)	3	20	.....
1	Cadet Instructors	2	.....	40
2	"	4	.....	134
3	"	1	.....	18
4	"	3	.....	32
5	"	1	.....	28
6	"	3	.....	21
7	"	1	.....	26
11	"	2	.....	46
13	"	2	.....	21

The number of officers and other ranks who obtained certificates at these Schools and at Camp Schools is shown in statement appearing on pages 24-27.

Staff Tours and Tactical Exercises

Staff Tours and Tactical Exercises were carried out throughout the year under arrangements made by District Officers Commanding.

Promotion Examination

A total of nineteen officers presented themselves at the written examination held in October, 1927. Of this number six qualified in one or more subjects for the rank of Major and twelve qualified for the rank of Captain. Thirty-three candidates sat at the March examination, the results of which are not yet to hand.

Foreign Languages

Interpretership Examinations in French, German, and Russian for officers were held under the regulations of the British Civil Service Commissioners at centres in Canada in June, 1927, and January, 1928, at which seven officers qualified as interpreters as follows:—*French.*—1st class, 1; 2nd class, 4. *German.*—2nd class, 1. *Russian.*—1st class, 1.

Canadian Officers' Training Corps

In addition to the annual training of C.O.T.C. Contingents as shown under "Training" above there was a very satisfactory attendance of Cadets at the half-yearly examinations for Certificates "A" and "B" as shown in the summary results given below.

The former certificate qualifies a candidate for a commission in the Non-Permanent Active Militia and the latter is equivalent to a certificate for the rank of Captain Non-Permanent Active Militia and exempts the holder from the Test Examination for entrance to the Long Course.

District	Contingent	Strength		Syllabus	Certificate "A"				Certificate "B"			
					Practical		Written		Practical		Written	
		Off.	O. Rs		Attend	Passed	Attend	Passed	Attend	Passed	Attend	Passed
1	Ontario Agricultural College	3	51	Infantry	9	8	7	4	4	4	4	4
				Infantry	15	14	13	6	5	5	5	3
1	Western Ontario University	14	150	Medical	17	9	9	8	11	11	13	10
2	University of Toronto	26	317	Artillery	9	9	9	6	.....	.....	.....	.....
				Infantry	66	60	55	45	16	16	21	17
				Medical	2	1	.....	.....	5	5	5	5
3	Queen's University	13	97	Infantry	25	20	18	11	17	16	12	7
4	McGill University	15	104	Cavalry	9	9	9	4	4	4	4	4
				Infantry	16	15	13	8	4	4	4	3
				Medical	7	6	6	3	1	1	1	1
	Loyola College	7	82	Infantry	16	16	16	13	.....	.....	.....	.....
4	University of Bishop's College	4	45	Infantry	11	11	11	7	1	1	3	3
	Université de Montreal	7	70	Signals	7	7	7	7	.....	.....	.....	.....
				Infantry	16	16	15	4	.....	.....	.....	.....
5	Laval University	6	45	Infantry	10	7	7	3	2	1	2	2
6	Nova Scotia Technical College	3	60	Engineers	19	19	17	12	.....	.....	.....	.....
				Infantry	.....	.....	.....	.....	.....	.....	2	2
7	University of New Brunswick	2	128	Infantry	63	49	47	24	10	10	10	4
10	University of Manitoba	28	145	Infantry	20	20	20	18	14	14	15	14
12	University of Saskatchewan	15	151	Infantry	26	22	22	20	9	8	9	8
13	University of Alberta	31	320	Infantry	33	22	20	12	3	2	2	1
				Medical	5	.....	.....	.....	.....	.....	.....	.....

RETURN OF CERTIFICATES OF QUALIFICATION GRANTED BETWEEN APRIL 1, 1927 AND MARCH 31, 1928

Officers

Name of School	Majors	Captains	Lieutenants	Quartermasters	Proficiency in Riding	Nursing Sisters	Artillery Staff Course	Cadet Services of Canada (N.P.) Grade "A"	C.S.A.S. "A" Wing	C.S.A.S. "B" Wing	C.S.A.S. "C" Wing	Signalling: Instructors V.T.	Signalling: Instructors L.T.	Signalling: R.M.C. and C.O.T.C. Cadet Qualified	Signalling: Qualified	Signalling: V.T. 1st Class (Special)	Signalling: V.T. 1st Class	Signalling: V.T. 2nd Class	Signalling: L.T. 1st Class	Partial Qualification Part I: Majors	Partial Qualification Part I: Captains	Partial Qualification Part I: Lieutenants	Partial Qualification Part II: Majors	Partial Qualification Part II: Captains	Partial Qualification Part II: Lieutenants	Certificates of Military Qualification, R.M.C.	Passed	Instructors P.T	Vickers Machine Gun	Transport Officers	Totals
Royal Canadian School of Cavalry, Toronto, Ont.	1		3		20																										24
Royal Canadian School of Cavalry, St. Johns, P.Q.	6	3	21		12																										42
Royal Canadian School of Cavalry, Winnipeg, Man.	1	1	3		8																										13
Royal Canadian School of Cavalry, Calgary, Alta.		5	1																												6
Royal Canadian School of Artillery, Kingston, Ont.	3	3	6				1																								13
Royal Canadian School of Artillery, Halifax, N.S.			2																												2
Royal Canadian School of Artillery, Winnipeg, Man.			6																												6
Royal Canadian School of Artillery, Esquimalt, B.C.			6																												6
School of Military Engineering, Halifax, N.S.		1	8																												9
Royal Canadian School of Signals		2	1									7	3	17	3																33
Royal Canadian School of Infantry and Machine Guns, London, Ont.	5	11	13																												29
Royal Canadian School of Infantry and Machine Guns, Toronto, Ont.	16	33	40																												89
Royal Canadian School of Infantry and Machine Guns, Quebec, P.Q.	2	8	9																												19
Royal Canadian School of Infantry and Machine Guns, Halifax, N.S.	4	16	19																												39
Royal Canadian School of Infantry and Machine Guns, Winnipeg, Man.	8	21	29																												58
Royal Canadian School of Infantry and Machine Guns, Esquimalt, B.C.	10	7	18																												35
Royal Canadian School of Infantry, St. Johns, P.Q.	3	2	1																												6
Can. Small Arms School	1	1	1																												185
R.C.A.S.C. Schools of Instruction	5	7	7	2	28				144	32	6																				53
Provisional Schools of Cavalry																				4	10	28							4		42

Provisional Schools of Artillery																			8	2	2									12
Provisional Schools of Engineers																			3	4	23									30
Provisional Schools of Signals															5	37	12	24												78
Provisional Schools of Infantry																			47	97	183									327
Provisional Schools of Machine Guns																			10	12	31									53
Provisional Schools of C.A.S.C.			5	4															2	17	22									50
Provisional Schools of C.A.M.C.		3	6																											9
Provisional Schools of Physical Training																											16			16
R.M.C., Kingston, Ont.					2																				15		1			18
Camp Schools of Cavalry	1	7	4		9																									21
Camp Schools of Artillery	13	9	24																				21	35						102
Camp Schools of Infantry	39	70	116	3	40			30														4	10	11				5		328
Camp Schools of Machine Guns	9	7	15																											35
Camp Schools of C.A.S.C.		5	23	2	13																									43
Camp Schools of C.A.M.C.		1	2																											3
Cadet Instructors' Course, London, Ont.								16																						16
Cadet Instructors' Course, Toronto, Ont.								91																						91
Cadet Instructors' Course, Kingston, Ont.								18																						18
Cadet Instructors' Course, St. Anne de Bellevue, P.Q.								7																						7
Cadet Instructor's Course, Quebec, P.Q.								23																						23
Cadet Instructors' Course, Halifax, N.S.		5						7																						12
Cadet Instructors' Course, Victoria, B.C.								25																						25
Cadet Instructors' Course, Calgary, Alta.								17																						17
Cadet Instructors' Course, St. Johns, P.Q.								20																						20
Cadet Instructors' Course, Hamilton, Ont.								11																						11
C.O.T.C. Candidates		*48	218																											266
Board of Examiners	5			6																										11
Militia Staff Course																										67				67
Examinations for Lieut. Colonel																										7				7
Examinations for Colonel																										40				40
R.C.O.C. School of Instruction			1																											1
Proficiency in Riding Courses					44																									44
Courses of Instruction, (Nursing Sisters)						7																								7
Totals	132	276	608	17	180	7	1	265	144	32	6	7	3	17	3	5	37	12	24	74	142	289	4	31	46	15	114	17	5	4	2,517

*33 "B" Interim.

COURSES HELD IN ENGLAND

Gunnery Staff Course	2
PFlash Spotting and Sound Ranging	2
Grand Total	2,521

RETURN OF CERTIFICATES OF QUALIFICATION GRANTED BETWEEN 1st APRIL 1927 AND 31st. MARCH 1928—Con.

WARRANT OFFICERS, NON-COMMISSIONED OFFICERS AND MEN

Name of School	W.O. (11)	Sergeants	Bombardiers and Corporals	Trumpeters	Gurlayers, C.D. and A.A.	H.B.P.F.	D.R.F.	Heightfinders	Farrier Sergeants	Proficiency in Riding	Artillery Staff Course	Artillery Specialists	Grade "B" Physical Training	Signalling: Asst. Instr. V.T.	Signalling: Asst. Instr. L.T.	Signalling: V.T. 1st Class (Special)	Signalling: V.T. 1st Class	Signalling: V.T. 2nd Class	Signalling: V.T. 3rd Class	Signalling: L.T. 1st Class	Signalling: L.T. 2nd Class	Signalling: Qualified	Cadet Signalling: Semaphore	Cadet Signalling: Morse	Cadet Signalling: Cadet Advanced	Specialists (P.F.): Asst. Instr. (Signals)	Specialists (P.F.): Stenography	Specialists (P.F.): Typewriting	Specialists (P.F.): P.T. Instructors	Specialists (P.F.): Fld. Works Instructors	Specialists (P.F.): S/Sgt. Engineer Draughtsman	Specialists (P.F.): Mil. Foreman of Works	Specialists (P.F.): Topographical Surveyor	Specialists (P.F.): Dispenser Part "A"	Specialists (P.F.): Engineer Clerk S/Sgt.	C.S.A.S.: "A" Wing	C.S.A.S.: "B" Wing	C.S.A.S.: "C" Wing	C.S.A.S.: Vickers Machine Gun	Qualification Part 1: W.O. (11)	Qualification Part 1: Sergeants	Qualification Part 1: Bombardiers and Corporals	Total
Royal Canadian School of Cavalry, Toronto, Ont.	3	20	21	1																																						45
Royal Canadian School of Cavalry, St. Johns, P.Q.		8	20																																							28
Royal Canadian School of Cavalry, Winnipeg, Man.		29	23						1	14																																67
Royal Canadian School of Cavalry, Calgary, Alta.	4	38	18																																							60
Royal Canadian School of Artillery, Kingston, Ont.	1	20	8								2																															31
Royal Canadian School of Artillery, Halifax, N.S.		14	7									33																														54
Royal Canadian School of Artillery, Winnipeg, Man.		45	5																																							50
Royal Canadian School of Artillery, Esquimalt, B.C.		5	8		50	9	23	8																																		103
School of Military Engineering, Halifax, N.S.		12	12																										12	1	4			1								42
Royal Canadian School of Signals														49	3											7																59
Royal Canadian School of Infantry, and Machine Guns, London, Ont.	9	15	8																																							32
Royal Canadian School of Infantry and Machine Guns, Toronto, Ont.	13	92	42																																							147
Royal Canadian School of Infantry and Machine Guns, Quebec, P.Q.	2	80	30																																			12				124
Royal Canadian School of Infantry and Machine Guns, Halifax, N.S.		11	1																																							12
Royal Canadian School of Infantry and Machine Guns, Winnipeg, Man.	4	21	36																																							61
Royal Canadian School of Infantry and Machine Guns, Esquimalt, B.C.	7	30	13																																							50

| | | |

(3) Report of Staff Officer, Artillery

Armament

The existing armament has been maintained in a serviceable condition as far as limited funds permitted. Reserves of Coast Defence and Field Army artillery ammunition are now far below the minimum required for the several natures of guns and are decreasing yearly through ammunition expended in practice. Lack of funds prevented any replacement during the year and only a small amount of necessary practice shell was provided for Coast Artillery. A large amount of up-to-date technical stores is required for the efficient training of the artillery but could not be provided during the past year.

The Anti-Aircraft Batteries in particular suffer from lack of up-to-date equipment.

Artillery Training, 1927-28

The training of Field and Medium Artillery was carried out during the year at central practice camps at Petawawa, Sarcee and Camp Hughes on the same lines as the preceding year with good results, but the present system only provides for the training of Officers and a nucleus of N.C.Os. and men amounting to about 35 per cent of the Peace Establishment. Horses and drivers were provided entirely by the Permanent Force for this training.

The program of training for Field and Medium Artillery, Coast Defence and Anti-Aircraft units was as follows:—

Field and Medium Artillery.—Three days at Local Headquarters and 8 days at central practice camp during which latter time 3 days were devoted to preliminary training, dismounted, and 4 days to battery tactics and gun practice, the 8th day being a Sunday. Of the Medium Batteries 60-pr. and 4·7-inch Batteries practiced with 18-prs. and 6-inch Howitzer Batteries practiced with 4·5-inch Howitzers as did also two 8-inch Howitzer Batteries, no horses or tractors being available for the guns of any of these units.

Heavy Artillery (Coast Defence units).—Eight days training at Local Headquarters and 4 days training in gun practice in the Forts, with the exception of the 6th (Q. & L.) Coast Brigade which trained 4 days at Local Headquarters and 8 days in the Forts at Halifax.

Anti-Aircraft Artillery.—One Anti-Aircraft Section trained for 12 days at Local Headquarters, including 4 days practice.

The present system of training of Field and Medium Artillery at central practice camps gives a satisfactory training in gunnery and, to a limited extent, in battery tactics, but does not permit of unit training and administration under unit officers as would obtain if funds permitted the attendance of a battery's proper complement including drivers and horses. The present system also prolongs the practice camp unduly owing to the necessity of horsing the Non-Permanent units with Permanent Force horses, which limits the number of batteries that can train during any one day.

Royal Canadian Schools of Artillery

Qualifying courses were held at the various Royal Canadian Schools of Artillery at Kingston, Winnipeg, Halifax and Esquimalt, during the autumn of 1927 and winter of 1928, and in addition Camp Schools at the three central practice camps and at Halifax and Esquimalt during annual training, for the practical qualification of personnel who had already passed the theoretical subjects at Provisional Schools. The total attendance at Royal and Camp Schools during the year under review was 133 Officers and 148 Other Ranks,

of whom 101 Officers and 87 Other Ranks qualified and 2 Officers and 12 Other Ranks are still under instruction. This shows a considerable increase in attendance at Royal Schools over the preceding year.

Twenty Provisional Schools, 18 of which were for the artillery of the Field Artillery and 2 for Coast Defence Artillery, were held throughout the country at the various unit centres during the year. At these schools 129 Officers and 303 Other Ranks reported for instruction but only 93 Officers and 117 Other Ranks reported for examination, of which number 70 Officers and 67 Other Ranks qualified and 15 Officers and 18 Other Ranks failed in one subject only and are entitled to take a supplementary examination.

(4) Report of Assistant Director of Signals

General

Signal Training for personnel of the Royal Canadian Corps of Signals, the Canadian Corps of Signals and Regimental Signallers of the Permanent and Non-Permanent Active Militia has continued to make progress during the year. All Districts are still in need of Assistant Instructors (Signals). It was found possible to attach three other ranks of the Royal Canadian Corps of Signals, who have been under special training at the Depot, The R.C.C.S., Camp Borden, as instructors, to certain Districts for instructional duty for the summer months. It is hoped to increase this number during the forthcoming year.

The Royal Canadian Corps of Signals

The limited establishment of the Royal Canadian Corps of Signals at the end of the fiscal year was 28 officers and 158 other ranks. The strength of the Corps at that date was 26 officers and 160 other ranks.

The distribution of the Corps on March 31, 1928, was as follows:—

—	Officers	Other Ranks
District Signal Officers	5	.....
Instructional Cadre (Signals)	.....	14
A.D. Signals' office and S.I. and T.D	5	13
Staff—The Depot, R.C.C.S. and Royal Schools	5	28
Northwest Territories and Yukon Radio System	4	21
Royal Canadian Air Force Radio System	.....	13
Under training at the Depot, R.C.C.S	4	71
Attending Staff College Camberly, Eng	1	.....
Attending Royal Military College, Kingston	2	.....
Total	26	160

During the year the Civil Government Air Operations took over the ground stations on the Ottawa-Borden, Manitoba and Alberta Radio Systems. The following additional ground stations will be operated during the forthcoming year: Winnipegosis, Man.; Prince Albert, Sask.; Big River, Sask.; Ile la Crosse, Sask.; Lac la Ronge, Sask., and Waskesue Lake, Sask.

Fourteen aircraft will be equipped with aircraft wireless sets having a range of 125 miles radio telephony and 200 miles wireless telegraphy.

The Short Wave Station at Ottawa established communication with London, England, and Melbourne, Australia. Departmental traffic is now handled daily over this system. Traffic is also relayed from England to Australia via Ottawa. Due to the difference in the time of daylight and dark periods in the three countries service communications can be increased by nine hours daily by this service.

For the Department of Railways and Canals the station at Cormorant Lake has handled all commercial traffic between Port Nelson and the Canadian National Telegraphs at The Pas and Winnipeg, Man., since August, 1927.

A small detachment of one officer and three other ranks of the Royal Canadian Corps of Signals accompanied the Hudson's Strait Expedition for the purpose of providing air to ground telephony and telegraphy communications. The Short Wave station at Ottawa kept the Hudson's Strait Expedition in communication with the Marine and Fisheries Department from July 22, 1927, to December 22, 1927, during which time 1,085 messages, consisting of 48,625 words, were handled.

The Northwest Territories and Yukon Wireless System operated by the Royal Canadian Corps of Signals for the Department of the Interior has continued to give good service during the year. The revenue from this system for the year shows a twelve per cent increase over last year and reached a figure of over $28,000. The station at Herschel Island was again operated during the summer months. A station was operated at Fort Resolution during the months June to October. This station will again be operated during the coming year and it is anticipated that it will be added to the permanent system for all year round operation.

Regimental Signallers of Permanent Force Units

The Annual Inspection and Classification of Permanent Force Signallers was, on the whole, satisfactory. The results for the past year are tabulated below. The numbers of non-commissioned officers and men under training and presented for classification shows a good percentage of the limited establishments. There is still a great need that junior officers be trained in units in order that they may supervise and encourage signal training within their units.

—	Classified			Under Training		
	Officers	N.C.Os	O.Rs.	Officers	N.C.Os	O.Rs.
"A" Squad. Royal Canadian Dragoons	.....	2	3	.....	.....	.....
"B" Squad. Royal Canadian Dragoons	.....	1	2	.....	1	2
"A" Squad. Lord Strathcona's Horse (R.C.)	.....	3	1	.....	.....	1
"B" Squad. Lord Strathcona's Horse (R.C.)	1	4	1	.....	.....	.....
"A" Battery, Royal Canadian Horse Artillery	.....	12	1	.....	.....	.....
"B" Battery, Royal Canadian Horse Artillery	.....	7	3	.....	1	4
"C" Battery, Royal Canadian Horse Artillery	.....	5	3	.....	.....	.....
1st Heavy Battery, Royal Can. Artillery	.....	1	3	.....	.....	3
2nd Heavy Battery, Royal Canadian Heavy Artillery	.....	1	1	.....	.....	6
3rd Medium Battery, Royal Canadian Artillery	.....	5	.....	.....	.....	3
5th Heavy Battery, Royal Canadian Artillery	.....	4	4	.....	.....	.....
"A" Company, Royal Canadian Regiment	.....	3	4	.....	3	2
"B" Company, Royal Canadian Regiment	.....	3	2	.....	.....	.....
"C" Company, Royal Canadian Regiment	.....	4	.....	.....	.....	.....
"D" Company, Royal Canadian Regiment	.....	1	.....	.....	.....	.....
"A" Company, P.P.C.L.I.	.....	3	7	.....	.....	1
"B" Company, P.P.C.L.I.	.....	8	15	.....	.....	2
"A" Company, Royal 22nd Regt	.....	4	.....	.....	.....	.....
Totals	1	71	49	.....	5	24

Royal Canadian School of Signals

The Royal Canadian School of Signals operated a camp school at Camp Borden during 1927. Qualifying Courses were held for officers and non-commissioned officers of the Canadian Corps of Signals and visual and line telegraphy courses for Permanent and Non-Permanent personnel. The following table shows the attendance and results of these classes.

ATTENDANCE

—	Officers	O.Rs.
Permanent Active Militia	.....	8
Non-Permanent Active Militia	16	73
R.M.C. and C.O T C. Cadets	17	.....

CERTIFICATES ISSUED

—	Visual		Line		Operator Group "C"		
	Inst.	Asst. Inst.	Inst.	Asst. Inst.	Cl. 1	Cl. 2	Cl. 3
Permanent Active Militia	.....	7	.....	.....	.....	.....	.....
Non-Permanent Active Militia	7	49	3	3	.....	.....	.....
R.M.C. and C.O.T.C. Cadets	.....	.....	.....	.....	12	4	1
	7	56	3	3	12	4	1

In addition to the above 3 officers and 11 other ranks of the Canadian Corps of Signals attended qualifying courses at the above school.

Three officers and two other ranks included in the above were awarded "Distinguished" certificates.

Provisional Schools of Signals

During the year the following Provisional Schools of Signals (evening classes) were conducted:—

Visual Telegraphy	80
Special Visual Telegraphy	8
Line Telegraphy	12
Cadet Classes (Afternoon)	78

The results of these schools are considered satisfactory and the number of schools held shows an increase over the number held during the previous year, but it is considered that the number of trained signallers turned out can be greatly increased as more instructors become available in each Military District.

The table below shows the number of certificates awarded at Provisional Schools during the year:—

—	Officers	Other Ranks
Visual Telegraphy:—		
1st Class Special	5	46
1st Class	37	549
2nd Class	12	264
3rd Class	.....	65
	54	924
Line Telegraphy—		
1st Class	24	64
2nd Class	.....	18
	24	82

Results of Annual Inspection and Classification of Signallers, Non-Permanent Active Militia.

The results of the Annual Inspection and Classification of Signallers of the Non-Permanent Active Militia during 1927 are as follows:

VISUAL TELEGRAPHY

Military District	Number of Classifications	Signallers presented	Classified
No. 1	35	266	248
No. 2	76	301	260
No. 3	33	298	283
No. 4	23	115	94
No. 5	21	117	100
No. 6	22	150	134
No. 7	21	164	139
No. 10	19	105	94
No. 11	17	118	108
No. 12	15	80	72
No. 13	16	72	66
Total	298	1,786	1,598

LINE TELEGRAPHY

No. 1	10	18	18
No. 2	14	44	43
No. 3	12	24	24
No. 4	5	8	8
No. 5	4	8	8
No. 6	3	11	11
No. 7	3	11	11
No. 10	5	12	11
No. 11	3	7	7
No. 12	8	16	15
No. 13	2	2	2
	69	161	158

WIRELESS TELEGRAPHY

No. 7	3	3	3

Awards of Trophies

The Signallers Challenge Cup, for annual competition between regimental signalling sections of Non-Permanent Cavalry and Infantry units, was won for the year 1927 by the Seaforth Highlanders of Canada, Military District No. 11.

The Cavalry Signallers Challenge Cup presented by the Canadian Cavalry Association for annual competition between regimental signalling sections of Non-Permanent Cavalry units, was won for the year 1927 by the 8th Princess Louise's New Brunswick Hussars, Military District No. 7.

The "Malloch Trophy" presented by the Canadian Signals Association for annual competition amongst companies of the Canadian Corps of Signals, was won for the year 1927 by No. 3 Company, 3rd Battalion, Canadian Corps of Signals. This is the first year of competition for this Trophy.

Cadet Classes in Signalling

At local headquarters, when an evening Provisional School of Signals is conducted, instruction in signalling is arranged for cadets who are twelve years of age or over and are enrolled members of an authorized cadet corps. Boys

who undergo this training make particularly desirable recruits for Canadian Corps of Signals units and are joining the Non-Permanent Signal Service in increasing numbers from year to year.

During the year ending March 31, 1928, the following cadet certificates were issued:—

1st year (Semaphore)	1,315
2nd year (Morse)	271
3rd year (Advanced)	58
Total	1,644

(5) Small Arms School

Small Arms Training

During the period under review, training in the rifle, bayonet, light automatic (Lewis and Hotchkiss), Vickers machine gun, revolver, and section leader training was carried out in both the Permanent and Non-Permanent Active Militia. In addition to general training the following annual courses were fired:—

Permanent Active Militia

The weapon training courses were practically identical with those fired in the British Army, being slightly modified to suit local conditions.

Recruits of cavalry, engineers and infantry fired an elementary course in the rifle and light automatic. Recruits of other units fired a modified course. Trained soldiers of cavalry and infantry fired the advanced classification course with rifle and light automatics; trained soldiers of engineers fired the advanced course for the rifle only, and those of other units fired a shorter course more suitable to their requirements.

The machine gun sections of infantry units fired the course laid down for the British Army.

The results obtained in the foregoing range courses were satisfactory.

Non-Permanent Active Militia

The program of weapon training was published in "Memorandum for Camps of Instruction, Part I," the various courses being based on those laid down for the British Territorial Army. The results were satisfactory, and show a further increase in the numbers trained in the light automatic.

King's Medal, 1927

The King's Medal for the champion shot of the Military Forces of the Dominion of Canada was won by Lieutenant D. T. Burke, the Governor General's Foot Guards, Ottawa. This officer also won the King's Medal in 1925.

Cambridge Challenge Bowl Competition

The Cambridge Challenge Bowl was won in 1927 by "B" Company, the Royal Canadian Regiment, Toronto, with an average rifle score of 98·9 points.

This trophy was donated by officers of His Majesty's Regular Army on leaving Canada, and is awarded to the squadron, battery, company, headquarters or detachment of any unit of the Permanent Force having a strength of thirty all ranks or over obtaining the highest average in the annual rifle course. To be eligible 80 per cent of the competing unit must take part in the competition.

Best Shot Badges

Best Shot Badges for the year 1927 were awarded to the best shot in the Royal Military College and in each squadron, battery, company, independent troop or headquarters wing of cavalry, artillery, engineers, corps of signals, corps of guides, officers' training corps, infantry, machine gun corps and army service corps of the Non-Permanent Active Militia.

The badge is awarded to the non-commissioned officer or man obtaining the highest score in the classification practices of the annual rifle course, and the names of winners are published in Militia Orders.

Returns show an increase of 133 badges over the number awarded the previous year.

Rifle Associations

On March 31, 1928, there were in existence 179 Military Rifle Associations and 100 Civilian Rifle Associations. The Dominion of Canada Rifle Association and all the Provincial Rifle Associations held prize meetings during the period under review.

Courses at the Canadian Small Arms School

Courses were held during the summer of 1927 for personnel of the Permanent and Non-Permanent Active Militia in the rifle, bayonet, light automatic, Vickers machine gun, revolver and section leader training, and, in addition, a course in anti-gas measures was conducted for selected personnel of the Permanent Force. The Main School was held at Connaught Rifle Range near Ottawa for units of Eastern Canada, and a Branch School was held at Sarcee Camp, Calgary, for candidates from Western Military Districts. Four hundred and eleven officers, W.O's and N.C.O's qualified in small arms during the year.

The following are the results of the courses:—

AT CONNAUGHT RIFLE RANGE

—	Passed	Failed
Course No. 50—Rifle (Service and Miniature)—		
Cadet Instructors	31	.....
Course No. 51.-Rifle and Light Automatic—Non-Permanent Active Militia—		
Officers	39	.....
W.Os. and N.C.O.s	37	.....
Course No. 52—Vickers Machine Gun, Range-finder and Revolver—Non-permanent Active Militia—		
Officers	7	.....
W.O.s and N.C.O.s	6	.....
Course No. 53—Anti-gas Measures—Permanent Force— (Not held)		
Course No. 54—Rifle, Light and Automatic Section Leader Training—Permanent Force—		
Officers	5	.....
W.O.s and N.C.O.s	21	.....
Course No. 55—Vickers Machine Gun, Range-finder and Revolver—Permanent Force—		
Officers	3	.....
W.O.s and N.O.C.s	19	.....
Course No. 56—For N.P.A.M. personnel who have passed Part I of a Provisional School of Small Arms—		
Officers	.....	.....
W.O.s and N.C.O.s	6	.....
Course No. 57—Rifle and Light Automatic—Non-Permanent Active Militia—		
Officers	19	.....
W.O.s and N.C.O.s	32	.....
Course No. 58—Vickers Machine Gun, Range-finder and Revolver—Non-Permanent Active Militia—		
Officers	8	.....
W.O.s and N.C.O.s	9	1
Course No. 59—Anti-gas Measures—Permanent Active Militia—		
Officers	6	.....
W.O.s and N.C.O.s	16	1

AT CONNAUGHT RIFLE RANGE—*Concluded*

—	Passed	Failed
Course No. 60—Artillery Staff Course, Small Arms Portion—		
Officers	1	.....
W.O.s and N.C.O.s	3	.....
Special P.F. "A" Wing Course, Part II—Rifle, Light Automatic and Section Leader Training—		
Officers	4	.....
W.O.s and N.C.O.s	1	.....
Special P.F. "B" Wing Course, Part II—Vickers Machine Gun, Range-finder and Revolver—		
Officers	9	.....
W.O.s and N.C.O.s	5	.....
AT SARCEE CAMP, CALGARY		
Course No. 62—Rifle (Service and Miniature)—		
Cadet Instructors	19	.....
Course No. 63—Rifle and Light Automatic—Non-Permanent Active Militia—		
Officers	14	.....
W.O.s and N.C.O.s	8	.....
Course No. 64—Vickers Machine Gun, Range-finder and Revolver—Non-Permanent Active Militia—		
Officers	.....	.....
W.O.s and N.C.O.s	7	1
Course No. 65—Rifle, Light Automatic and Section Leader Training—Permanent Active Militia—		
Officers	2	.....
W.O.s and N.C.O.s	17	1
Course No. 66—Vickers Machine Gun, Range-finder and Revolver—Permanent Active Militia—		
Officers	2	.....
W.O.s and N.C.O.s	9	1
Course No. 67—Rifle and Light Automatic—Non-Permanent Active Militia—		
Officers	7	.....
W.O.s and N.C.O.s	15	1
Course No. 68—Vickers Machine Gun, Range-finder and Revolver—Non-Permanent Active Militia—		
Officers	2	.....
W.O.s and N.C.O.s	11	.....
Special P.F. "A" Wing Course, Part II—Rifle, Light Automatic and Section Leader Training—Permanent Active Militia—		
Officers	4	.....
W.O.s and N.C.O.s	4	.....
Special P.F. "B" Wing Course, Part II—Vickers Machine Gun, Range-finder and Revolver—Permanent Active Militia—		
Officers	1	.....
W.O.s and N.C.O.s	2	.....

(6) Physical Training and Cadet Services

Physical Training

During the fiscal year ending March 31, 1928, 55 Courses of Instruction in Physical Training were held at Normal Schools and other centres. These were attended by 1,500 male and 5,000 female student teachers. In the instruction of these classes 35 warrant officers and n.c.os. of the Permanent Force were employed, with 11 civilian instructors. In all cases the classes were supervised by the District Cadet Officers, who conducted the examinations and issued certificates to 6,124 students who passed the required examinations.

In addition to conducting these classes Permanent Force Instructors in many Centres visited the Schools on invitation of School Boards and contributed materially to the advancement of physical education in these institutions. In one large city the Secretary of the Board of Education, writing to the District Officer Commanding in regard to this instruction says: "I am pleased to note an improvement in the standard of teaching. The whole course was most stimulating to both teachers and pupils."

Cadet Corps

Cadet Services now include 866 Units with a strength of 130,298 cadet officers and cadets. This represents an increase of slightly over 12,000 cadets during the year, this being brought about through the formation of 34 new Units and increases in the strength of existing Detachments.

The distribution by provinces is as under:—

Province	Number of Cadet Corps	Strength
Alberta	36	6,149
British Columbia	30	5,977
Manitoba	43	3,357
New Brunswick	48	2,502
Nova Scotia	42	3,367
Ontario	293	39,612
Prince Edward Island	9	816
Quebec	296	64,111
Saskatchewan	69	4,407
Total	866	130,298

Reports from all provinces indicate a higher standard of efficiency than in previous years.

The Earl Grey Trophy, which is awarded annually to the province having the largest number of Cadets in proportion to boys attending school, was again awarded to the province of Quebec, to be held for a period of six months by No. 352, Commercial Academy Cadet Corps, Quebec, P.Q. and for a further six months by No. 2, Bishop's College School Cadet Corps, Lennoxville, P.Q., these being the most efficient Units in their respective Military Districts.

Cadet Training

Particular attention has been given to Specialist Training, much time being devoted to instruction in Signalling and First Aid work.

In Signalling, the following Certificates were issued during the year:—

Cadet Semaphore	1,315
Cadet Morse, 1st year	271
Cadet Morse, advanced	58

For First Aid, the Honourable Wallace Nesbitt has donated a valuable trophy to be competed for annually by cadet teams and during the year under review 51 teams took part in the competition, the trophy being awarded to No. 994 Sea Cadet Corps, Montreal, P.Q. with No. 48, Oakwood Collegiate Institute Cadet Team, Toronto, Ontario, taking second place.

Miniature Rifle Shooting

The series of Matches for Cadets conducted by the Dominion of Canada Rifle Association continued to grow in popularity, 354 teams firing in those held during the winter of 1928.

First prize in each series was won as under:—

Series I

Collegiate and High Schools Cadet Corps

Senior Teams.

First.—Central Collegiate Institute, Hamilton, Ont.

Prize.—B.S.A. Guns, Limited, Silver Shield.

Junior Teams.

First.—Calgary High School Cadet Corps.

Prize.—The Junior Shield.

Series II

Public Schools, Separate Schools, Continuation Schools and other Cadet Corps

Senior Teams.

First.—First Regina Rifles Cadet Corps.

Junior Teams.

First.—Portland Cadet Corps, Saint John, N.B.

In the match for His Majesty the King's Trophy 4,728 Canadian Cadets competed and for the first time Canada's team has won this much coveted Trophy, which for the last two years had been won by South Africa.

This Trophy so generously donated by His Majesty the King is awarded to that part of the Empire whose team of 3,000 Cadets, firing locally, makes the highest aggregate score. The total points obtainable by each competitor is 100. Canada's team of 3,000 boys averaged 79·2, with South Africa in second place with an average of 78 points.

In addition to winning the Shield Canada has also been awarded the Sword of Honour donated by the late Earl Haig. This was won by King George School Cadet Corps, Saint John, N.B., whose team of 18 boys averaged 94·53 points.

In this competition Silver Medals of Honour are awarded to competitors scoring 99 and 100 points and Bronze Medals to competitors scoring 97 and 98 points. Canadian Cadets won 79 Silver and 160 Bronze Medals.

Many other rifle matches were also fired during the year. The Cup presented by His Majesty the King for service rifle shooting was fired for by 34 teams, the Trophy being won by No. 48, Bloor Collegiate Institute Cadet Corps, Toronto, Ontario.

The Royal Military College Club Trophy, also fired for with service rifles, was competed for by 34 teams, and was won by No. 1142, St. Vincent High School Cadet Corps, Saint John, N.B.

Cadet Instructors' Courses

To provide for the proper training of Cadet Corps, it is necessary to arrange for Courses of Instruction for school teachers; such Courses were, in 1927—28 attended by 265 male teachers, to whom certificates of qualification were issued, while 34 qualified Cadet Corps Instructors attended Courses at the Canadian Small Arms School.

(7) Historical Section

Collection, Classification and Disposal of Documents

The Historical Section moved in November, 1927, with all documents, from the Canadian to the Daly Building. The transfer of such a mass of documents and their re-arrangement in the new quarters necessarily retarded the normal work of the Section for some weeks.

During the year approximately 3,000 cubic feet of overseas correspondence was sorted, from which 50 cubic feet of historical material pertaining to the Canadian Overseas Forces was extracted and retained in the Historical Section.

Two hundred and twenty-seven files relating to the European War were received from Military District No. 2.

One hundred and sixty-two files containing complete set of casualty lists from November 11, 1916, to December 2, 1919, were transferred to the Record Office.

Three thousand two hundred and forty-seven Badges worn by units of the Canadian Expeditionary Force were listed and transferred to Public Archives, Ottawa.

Four hundred and eighty-five photographic enlargements (Canadian Official War Photographs) were also transferred to the Archives.

During the period triplicate copies of the war diaries of the 15th, 19th, 20th and 38th Infantry Battalions, 2nd Battalion, C.E., and 1st Canadian Siege Battery were checked, missing folios duplicated from originals, and the completed diaries transmitted for incorporation in the records of the perpetuating units.

Triplicate copies of war diaries of Canadian Field Ambulances were lent to a contributor to the *Defence Quarterly*.

A selection of 120 Canadian Official War Photographs, covering the activities of the various arms and services in the field, was made for instructional purposes, so that lantern slides could be prepared and sent to each Military District and the R.M.C., where they will be available for lecturers.

A complete list of captions of the Canadian Official War Photographs, numbering over 7,000, is being prepared so that prints of these may be made available for purchase by the public.

Recruiting, Organization, Mobilization, Equipment and Services of the C.E.F.

Statements have been prepared (from statistics supplied by the Record Office) showing:—

(*a*) Total number of troops proceeding from Canada by arms of the service to England, Siberia, St. Lucia and Bermuda.

(*b*) Total number of troops in C.E.F.: (i) outside of Canada; (ii) in Canada only; (iii) the whole force.

Perpetuation of C.E.F. Units and Awards of Battle Honours

Work in connection with the award of Battle Honours has necessitated the continuous employment of a portion of the staff; during the last quarter of the year under report the time of most of the personnel has been devoted to this subject.

One hundred and five lists were compiled, covering 55 Militia Regiments and 50 perpetuated C.E.F. units, showing all Battle Honours earned by each unit, letters were prepared instructing Military Districts to arrange for selection of ten of these Honours, by special Committees, for emblazonment on the Colours or Appointments of each Militia Regiment or C.E.F. unit concerned, as authorized by General Order No. 6, 1928.

To arrive at eligibility for honours, 15,562 Other Ranks, who passed through the units of the Canadian Machine Gun Corps, C.E.F., during 1918, were allotted to original battalions of enlistment.

A detailed statement was prepared showing the number of units which would forfeit the Battle Honour "Mount Sorrel" if the geographical boundary were amended.

Battle Honours for which units of the Canadian Machine Gun Corps are considered eligible have been worked out in accordance with the recommendations of the Battle Honours Committee as approved by Defence Council.

Revision and checking of all operations of the sixty-seven honour-earning units which served in the field was necessitated by amendments to method of award of honours.

Replies were made to numerous queries of Officers Commanding Militia Regiments with regard to the deletion of certain Actions from the Canadian list of Battles to conform with the British list, and explanations made of the application of certain sections of General Order No. 6 of 1928.

To establish validity of claims for honours, an exhaustive survey of the North West Campaign of 1885 was carried out, and a statement prepared showing the units which participated, the nature and the extent of their services, the number of men employed, the casualties, and the Battle Honours awarded.

Compilation of an Historical Account of the Canadian Forces in the Great War

Progress has been made in collecting and arranging information contained in official correspondence to be used in connection with the Official History.

The Section has continued to assist Regimental Historians. In this connection the activities of the 1st Canadian Siege Battery, from arrival in France to demobilization, were set out in chart form for the use of the historian.

Historians of the 15th, 16th, 38th and 42nd C.E.F. Battalions, 6th Canadian Battalion, C.E., and of No. 3 General Hospital, were also supplied with historical information.

Preparation of Historical Monographs, Narratives, etc., in Connection with the Military History of Canada

The draft Chapter on Canadian Defence, in the section on the Constitutional History of Canada, in the forthcoming volume of the Cambridge Modern History, was carefully checked, and many suggestions for amendment and addition made after original documents in the Archives and the Parliamentary Library had been consulted.

Twelve historical facts concerning the Department of National Defence from 1867-1927 were compiled for the Mortimer Co., Ottawa, in connection with the Diamond Jubilee of Confederation.

A full summary was prepared of all treaties, international conferences and proceedings of the League of Nations directed towards Disarmament, for official purposes.

In connection with a request that H.M. the Queen accept the Honourary Colonelcy of The Queen's Own Rifles of Canada, a brief history of the regiment from its organization in 1860 to the present time was prepared, together with a record of senior officers and skeleton histories of the C.E.F. battalions raised by this Regiment for service during the War.

A short history of the Perth Regiment (28th Perth Battalion of Infantry) from 1866-1927 was prepared.

Notes relating to persons born in the United States who served in the C.E.F. were compiled in connection with the erection of the Canadian Memorial in Arlington Cemetery, Washington, D.C.

A biographical sketch of the late Field Marshal Earl Haig was prepared for an address at the Memorial Service held in Ottawa.

A statement regarding C.E.F. Battalions raised in the province of Manitoba was compiled, showing designation of unit, towns and districts in which recruited, place of mobilization, and name of perpetuating unit.

In connection with an article on Mons, published in the Port Hope *Evening Guide* on June 13, 1927, copies of all operation orders and reports bearing upon the cessation of hostilities and the capture of the town were made and forwarded to the parties in the ensuing libel action.

The Compilation of Historical Data Relating to the War for the Historical Section (Military Branch) Committee of Imperial Defence, London

The British Official History, Volume III, dealing with 2nd Battle of Ypres, in which the 1st Canadian Division took a leading part, contained a generous acknowledgment of the assistance given by the Canadian Historical Section in supplying data for this work.

Supply of Information to Historical Investigators

Historical data supplied under this heading included:—

Particulars regarding the number of Brome County men in C.E.F. units for a member of the Senate in connection with the choice of a flag to be deposited in St. Paul's Church, Knowlton.

Information concerning the 15th Light Horse and Officers of "G" Squadron, C.M.R., for incorporation with records of the 15th Light Horse.

A precis covering the actions of the 85th Battalion, South of Lens, during April and June, 1917.

Details of gas and oil projections on the front of the 12th Canadian Infantry Brigade, June-August, 1917.

A list of 64 British officers who served with the Canadian Forces in the Great War was checked, and 150 names added, with appointments held and dates of attachment. This information for the records of the High Commissioner, London.

Investigation of statements concerning The Toronto Regiment with respect to services of 3rd Battalion, C.E.F., and supply of full details for the information of the Adjutant General.

List of Infantry, Pioneer, Engineer and Machine Gun Battalion Commanders of the 1st Canadian Division, showing decorations and dates of command, for reference purposes.

Information for the Bureau of Research, Consolidated Book Publishers, Chicago, with respect to Canada's efforts in the World War regarding,—

(i) Prisoners taken by Canadians.

(ii) Number of Canadians taken prisoner.

(iii) Number of Canadian Pilots in R.A.F.

(iv) Number of square miles of territory captured by Canadian Corps.

(v) Number of soldiers in Canadian Army.

A statement showing the Ammunition Supply Units and their establishments, which supplied the Canadian Artillery during the War, in connection with an article for the "Canadian Defence Quarterly."

Particulars regarding the formation of the Upper Canada College Rifle Company in 1866.

The activities of the 2nd Canadian Divisional Ammunition Column and V/2/C Heavy Trench Mortar Battery between January, 1916, and January, 1917.

Information for the Principal, Upper Canada College, regarding the circumstances under which Lieut. A. R. Dunn (an old Upper Canada College boy), 11th Hussars, won the Victoria Cross in the Charge of the Light Brigade at Balaclava on the 25th October, 1854.

Narrative of the action of the 22nd Battalion, C.E.F., at the Battle of Courcelette, September, 1916.

Appropriate lists of battles in which local troops participated, for War Memorials being erected in Winnipeg, Kingston and Halifax.

A statistical statement for the information of the Department of S.C.R., dealing with physical fitness of recruits arriving in England.

During the month of January, 1928, Mr. T. H. E. Heyes, Representative of the Australian War Memorial, visited the Historical Section for the purpose of obtaining historical data of interest to the Australian historian. Every assistance was given him in the discharge of this work and valuable information was received from him as to the method of writing the Official History and caring for war documents and trophies in Australia.

Memorial Chamber, Parliament Buildings

The wording for inscriptions on Panels 10, 11, 12, 13, 15, 16 and 17 was completed during the year. These have been carved and the marble panels erected in the Chamber.

(*b*) The Royal Canadian Air Force

The direction and control of aeronautics in Canada, both civil and military, come under the jurisdiction of the Department of National Defence. The powers and duties involved are exercised under the direction of the Minister by four separate branches of the Air Services, namely, the Directorate of Civil Government Air Operations; the Controller of Civil Aviation; the Aeronautical Engineering Division; and the Royal Canadian Air Force.

The first three of these branches are responsible directly to the Deputy Minister, and information regarding them may be found in the " Civil Aviation " section of this Report, and also in the separate " Report on Civil Aviation, 1927," which can be obtained by application to The Secretary, Department of National Defence, Ottawa.

The Royal Canadian Air Force

The Royal Canadian Air Force is the Military Branch of the Air Services. The Chief of the General Staff, through the Director, R.C.A.F., administers and controls all military air operations.

The Royal Canadian Air Force has the following composition:—

(*a*) The Active Air Force.

(*b*) The Reserve.

(*a*) *The Active Air Force*

The Establishment of the Permanent Active Air Force of Canada consists of 115 Officers and 512 Airmen permanently embodied for continuous service, and available for general service, including training and operations for Civil Government Departments. The strength of the Royal Canadian Air Force was 117 Officers and 454 Airmen on March 31, 1928. Out of this total about half were attached for duty with the other branches of the Air Services.

The Non-Permanent Active Air Force is comprised of such Units or Detachments and other formations as are from time to time named by the Governor in Council. At present there are authorized 67 Officers and 130 Airmen. The strength of the Non-Permanent Active Air Force is 37 Officers and 1 Airman.

(*b*) *The Reserve*

The policy of the department is to create a large reserve list consisting of personnel qualified in the several branches of Air Force duties.

The Reserve will be inactive except for such special courses as may be authorized by the Honourable the Minister, though personnel on the Reserve will be liable to call for duty with the Active Air Force.

Headquarters, R.C.A.F.

R.C.A.F. Headquarters is organized as follows:—

Director, R.C.A.F.
Assistant Director, R.C.A.F.

Director, R.C.A.F.

1. Staff Officer Personnel.
2. Staff Officer Equipment.

Assistant Director, R.C.A.F.

1. Staff Officer Organization.
2. Staff Officer Training.
3. Staff Officer Operations and Intelligence.
4. Staff Officer Regulations.

R.C.A.F. Station, Vancouver

R.C.A.F. Station, Vancouver, B.C.—The Station is well equipped in regard to hangars, shops, and slipways. Barrack accommodation and housing of the personnel are required.

R.C.A.F. duties:—

(1) Seaplane flying training for personnel of the R.C.A.F. and Civil Government Air Services (ab initio).
(2) Winter training—Officers and Airmen.
(3) Combined operations and training with Naval and Military Forces.

During 1927, ab initio seaplane training was carried out, at which 9 Officers and 2 N.C.O.'s. attended, all of whom qualified as seaplane pilots.

R.C.A.F. Station, Camp Borden

The Air Station at Camp Borden carries out training of personnel for all the Branches of the Air Service. During the fiscal year 1927 training was carried out as follows:—

(*a*) Refresher flying courses were given to 12 Permanent Officers and 4 N.C.O. Pilots, and 15 Non-Permanent Officers.

(*b*) Training for Provisional Pilot Officers.—17 Provisional Pilot Officers underwent their first term of ab initio flying training, 13 of whom passed their examinations at the completion of the term.

Nine Provisional Pilot Officers attended for the second term of ab initio flying training, eight of them successfully completing their second term.

Fifteen third term Provisional Pilot Officers attended, fourteen of whom successfully passed their examinations upon the completion of the course and qualified as pilots. Three of the successful candidates were given further flying instruction and granted Non-Permanent Commissions in the R.C.A.F. It is expected that about three more of this term will be given commissions in the near future.

(*c*) Nine commercial pilots received flying training and they all passed their tests.

(*d*) An N.C.O. Pilots' Course was given, 11 Airmen attending, 3 of whom qualified as N.C.O. Pilots (ab initio).

(*e*) A Parachute Course was given, at which two officers attended. Both officers qualified.

(*f*) A Flying Instructors' Course was given, at which twelve officers attended. These officers were classified, or, in the case of former Instructors, re-classified, at the completion of the course.

(*g*) A Technical Training Course for boys was carried out, and twenty boys attended, of whom sixteen qualified.

A Refresher Flying and Ground Instruction Course for Officers and Airmen of the Hudson Straits Expedition personnel was completed during 1927.

R.C.A.F. Training, Generally

R.C.A.F. Training may be divided into two categories; training for Officers, and for Airmen.

The training for Officers and Airmen at Vancouver and Camp Borden during the year has been most successful, both as regards Service personnel and those attached to other Government Air Services.

R.C.A.F. Officers have been attached for courses of instruction at the Royal Military College, Kingston, and elsewhere throughout the country.

Officers of the Royal Canadian Air Force attached for training with the Royal Air Force in England:—

	Officers attending
(a) Royal Air Force Staff College, Andover	2
(b) Flying Instructors' Course—Central Flying School, Wittering	1
(c) Navigation, at Royal Air Force School of Air Pilotage	1
(d) Army Co-operation, at Old Sarum, Salisbury	1
(e) Armament Course, Eastchurch	1
(f) Aeronautical Engineering, Imperial College of Science	1
(g) War Staff Course—Royal Naval Staff College, Greenwich	1

Provisional Pilot Officers' Training

The idea underlying the present scheme of the R.C.A.F. Provisional Pilot Officers' Training is to obtain, with the minimum of expense, a class of young officer having, in addition to his knowledge of flying, a thorough all-round education, with special qualifications on the technical side. With this in view, arrangements have been made with the Canadian universities to accept for air force training a number of students in their first year from the Applied Science and Engineering faculties, and train them at Camp Borden during the summer vacations each year of their university course. A gratifying response has been made, and sufficient numbers of volunteers apply each year to ensure success. A number of Gentlemen Cadets from the Royal Military College are accepted each year in the same way. The scheme of training is shown in a pamphlet issued on the subject, which can be obtained by application to the Secretary, Department of National Defence, Ottawa.

Training for Airmen

Technical Training of Boys and Airmen at Camp Borden.

This scheme of training was approved on November 5, 1925, and was inaugurated on July 4, 1927, when twenty boys from all parts of Canada reported at R.C.A.F. Station, Camp Borden, for two months' training. A pamphlet containing information regarding the plan of training for airmen is available and can be obtained on application to the Secretary, Department of National Defence, Ottawa.

Combined Operations with the Naval and Military Forces.

Owing to the reorganization of the Air Service which became effective July 1, 1927, the condition of the landing grounds at the different military camps, etc., it was only possible to carry out one operation of three hours and fifteen minutes flying time, with the cavalry and infantry at Sarcee Camp, in August, 1927.

SUMMARY OF FLYING 1927-28

	Hrs.	Mins.
Aerial Photography for Geographical Section, Militia Surveys	70	40
R.C.A.F. Transportation	64	45
Service Flying	3,787	55
Miscellaneous	73	45
Forest Fire Protection Patrol for Forestry Department, to July 1st, 1927	289	55
Preventive Service	16	20
Total	4,303	20

REPORT OF THE ADJUTANT-GENERAL

(1) Permanent Active Militia

The vote for the fiscal year 1927-28 remained the same as for previous years. Accordingly only slight changes were made in the establishments as indicated under the heading of "Establishments and Strength."

Recruiting

On April 1, 1927, the strength in warrant officers, non-commissioned officers and men was 3,189.

During the year there were 743 enlistments and 757 discharges.

On March 31, 1928, the strength in warrant officers, non-commissioned officers and men was 3,175.

Establishments and Strength

The following table shows the Peace Establishment, Limited Establishment, and the actual strength of units of the Permanent Active Militia:—

PERMANENT ACTIVE MILITIA

Unit	Authorized Establishment			Limited Establishment			Actual Strength		
	Offrs	Other Ranks	Total	Offrs	Other Ranks	Total	Offrs	Other Ranks	Total
Officers permanently employed not borne on Regimental Establishment (Staff and Cadet Officers)	.....	.....	.....	.....	.....	.....	28	.....	28
Officers seconded and specially employed outside Regimental Establishments—Not paid from Permanent Force Vote	.....	.....	.....	.....	.....	.....	58	.....	58
Total	.....	.....	.....	.....	.....	.....	86	.....	86
R.C.D.	28	498	526	16	221	237	15	211	226
L.S.H. (R.C.)	28	498	526	16	172	188	14	161	175
R.C.A.	65	1,004	1,069	54	653	707	50	618	668
R.C.E.	51	353	404	34	243	277	29	233	262
R.C.C.S.	29	169	198	28	158	186	26	160	†186
R.C.R.	36	924	960	30	421	451	26	389	415
P.P.C.L.I.	29	690	719	27	245	272	24	221	245
Royal 22nd Regt.	15	422	437	15	161	176	15	149	164
R.C.A.S.C.	33	412	445	27	253	280	26	249	275
R.C.A.M.C.	37	103	140	29	96	125	28	95	123
R.C.O.C.	36	690	726	36	442	478	35	431	466
R.C.A.V.C.	7	23	30	6	12	18	6	11	17
R.C.A.P.C.	25	100	125	20	70	90	19	69	88
C.M.S.C.	9	202	211	8	183	191	8	176	184
C.S.A.S.	4	2	6	4	2	6	4	2	6
Total	432	6,090	6,522	350	3,332	3,682	325	3,175	3,500
Grand total	432	6,090	6,522	350	3,332	3,682	411	3,175	3,586

†Includes 13 Officers and 88 other ranks employed at wireless stations maintained in connection with Royal Canadian Air Force, Canadian Government Air Operations, Dept. of the Interior, (N.W.T. Branch) and Dept. of Marine and Fisheries.

Nomenclature

The undermentioned Permanent Schools of Instruction at the places named have been granted the title "Royal" and are now designated as follows:—

School	Location
"The Royal Canadian School of Cavalry"	Toronto, Ont. St. Johns, P.Q. Winnipeg, Man. Calgary, Alta.
"The Royal Canadian School of Artillery"	Kingston, Ont. Winnipeg, Man. Halifax, N.S. Esquimalt, B.C.
"The Royal Canadian School of Military Engineering"	Halifax, N.S.
"The Royal Canadian School of Signals"	Camp Borden, Ont.
"The Royal Canadian School of Infantry"	St. Johns, P.Q.
"The Royal Canadian School of Infantry and Machine Guns"	London, Ont. Toronto, Ont. Quebec, P.Q. Halifax, N.S. Esquimalt, B.C. Winnipeg, Man.

Alliances

His Majesty the King has authorized the alliance of the Royal 22nd Regiment to the Royal Welsh Fusiliers of the British Army.

(2) Non-Permanent Active Militia

Organization

The following changes in organization have been authorized:—

Artillery—

The 60th Field Battery, C.A., at Aneroid, Sask., and the 90th Field Battery, C.A., at Fredericton, N.B., have been authorized to organize.

In the composition of the 8th Field Brigade, C.A., the 54th Field Battery, C.A., Brantford, Ont., has replaced the 49th Field Battery, C.A., Welland, Ont.

Canadian Officers' Training Corps—

The organization of Contingents, C.O.T.C., has been modified, and is now authorized to consist of:—

Contingent	Organization to consist of:—				
		Number of Companies			
	Bn. H.Q.	H.Q. and 4 Platoons	H.Q. and 3 Platoons	H.Q. and 2 Platoons	Platoons
University of Western Ontario	1	2			
Ontario Agricultural College				1	
University of Toronto	1	4			
Queen's University	1	2			
McGill University	1	3			
Loyola College		1			
Universite de Montreal		1			
University of Bishop's College				1	
Macdonald College		1			
Laval University		1			
La Salle				1	
Nova Scotia Technical College				1	
Dalhousie University		1			
Acadia University				1	
St. Francois Xavier				1	
University of New Brunswick		1			
Mount Allison University					1
Brandon College			1		
University of Manitoba	1		2	2	
British Columbia University	1	2			
University of Saskatchewan	1	2			
Regina College					1
Alberta University	1	4			

Infantry—

The following have been converted to Highland and Scottish units:—

The Lanark and Renfrew Regiment.
The Cumberland Regiment.
The Prince Edward Island Regiment.
The Essex Fusiliers.

C.A.S.C.—

The number of Divisional Trains has been increased from 11 to 12 in order to provide for a complete Divisional Train in each of Military Districts Nos. 6 and 7.

C.A.M.C.—

The organization of No. 13 Field Ambulance at Victoria, B.C., and No. 32 Field Ambulance at Regina, Sask., has been authorized.

Classification by Corps—Cavalry

Regiments of cavalry and mounted rifles have been classified by corps as set forth in General Order 97 of 1927, for the purpose of the regulations governing the carrying of Standards and Guidons.

Classification is divided into two Corps, namely, "Dragoons" and "Hussars." The latter includes all existing regiments of Hussars. Regiments other than Hussars are classified as units of the Corps of Dragoons.

Peace Establishments

The Peace Establishments of the Non-Permanent Active Militia remain practically unchanged.

Nomenclature

Artillery—

The 90th (Newcastle) Field Battery, C.A., has been renumbered "28th."

The 28th Field Battery, C.A., has been renumbered "90th."

Infantry—

The following regiments have been redesignated as stated:—

Old Title	*New Title*
The Lanark and Renfrew Regiment	The Lanark and Renfrew Scottish Regiment.
The Cumberland Regiment	The Cumberland Highlanders.
The Prince Edward Island Regiment	The Prince Edward Island Highlanders.
The Essex Fusiliers	The Essex Scottish.
The Princess Louise's (Argyll and Sutherland Highlanders) of Canada	The Argyll and Sutherland Highlanders of Canada (Princess Louise's).
The Queen's Rangers	The Queen's Rangers, 1st American Regiment.

Localization

The localization of units of the Non-Permanent Active Militia has been changed from time to time to suit the conditions and population of the country.

Alliances

During the past year, His Majesty the King has granted authority for several units to be allied with regiments of the British Army, as follows:—

Regiment	*Regiment of British Army with which allied*
The Princess Louise Dragoon Guards	10th Royal Hussars (Prince of Wales's Own).
The Canadian Fusiliers (City of London Regiment)	The Royal Fusiliers (City of London Regiment.
The York Rangers	The Green Howards (Alexandra, Princess of Wales's Own Yorkshire Regiment).
The Halton Rifles	The Royal Ulster Rifles.
The Calgary Regiment	The King's Own Royal Regiment (Lancaster).
The Prince Albert Volunteers	The Bedfordshire and Hertfordshire Regiment.
The Toronto Regiment	The King's Regiment (Liverpool).

Perpetuations

The perpetuation of Artillery Units of the Canadian Expeditionary Force, the Great War, by units of the Canadian Artillery, N.P.A.M., has been authorized as set forth in General Order 83 of 1927, and will be recorded accordingly in the Militia List.

Battle Honours, The Great War

The conditions of award of Battle Honours for the Great War, 1914-19, to Canadian units have been laid down and promulgated in General Order 6 of 1928.

A tabulated list of engagements of the Great War in which troops of the Canadian Expeditionary Force took part, showing the geographical and chronological limits of each action, has been promulgated in General Order 7 of 1928.

Battles, Actions, etc., recorded in the above mentioned list are those only in which regularly organized Canadian units took part.

Meritorious Service Medal

Regulations governing the award of the Meritorious Service Medal have been revised along similar lines to the Imperial Regulations in this regard. In accordance therewith a silver medal, designated "Meritorious Service Medal," may be awarded under certain defined conditions, to:—

(*a*) A soldier or pensioner of the Permanent Force who is recommended on account of valuable and meritorious service.

(*b*) A soldier of the Active Militia who is recommended on account of gallant conduct in the performance of military duty, or in saving or attempting to save the life of an officer or soldier, or for devotion to duty in a theatre of war.

The number of Meritorious Service Medals in wear under (*a*) may not exceed 75, and future awards under the clause mentioned will be restricted to discharged soldiers of the Permanent Force.

Discipline

The discipline of the Permanent and Non-Permanent Active Militia during the past year has been satisfactory. The number of convictions by District Court Martial for the year was 63.

Dental Treatment

Dental Treatment has been satisfactorily carried out to ensure dental fitness of the Permanent Active Militia. In the case of the Non-Permanent Active Militia, dental treatment to the limited extent provided for under the regulations has been effected.

Standards, Guidons and Colours

Specifications for Standards, Guidons and Colours for the Canadian Militia have been authorized and follow those in force in the British Army with certain modifications, the chief of which is the use of a wreath of Autumnal Tinted Maple Leaves in place of the Union Wreath of Roses, Thistles and Shamrocks.

Regimental Facings

Regimental Facings of the Colours stated hereunder have been authorized for the following units:—

"Buff"—The Highland Light Infantry of Canada.
"Dark Green"—The Winnipeg Light Infantry.

(3) Personal Services

Very satisfactory advancement has been made during the year under report, in the matter of the completion of appointments of qualified officers to fill the vacancies in authorized establishments of all arms of the service. The interest maintained generally by commissioned ranks of military organizations throughout the Dominion has been sincere, and there has been every indication of progress towards a higher grade of administration, as well as the desire to build up to the requisite standard.

As a general policy it is usual for senior officers who have served for the regulation tenure on the active cadres, to transfer to the reserve formations of their respective units, and they thus still remain identified with, and interested in, their corps.

Consequent upon the expiration of tenures of command during the year, changes in the command of Brigades and Units were carried out to the following extent.

Brigade Commanders (Cavalry and Infantry)	18
Officers Commanding Cavalry Regiments, Artillery Brigades and Regiments of Infantry	73
Engineer, Signal, Army Service Corps and Medical Units	19
Reserve formations (all branches)	52

The number of officers, including provisional appointments, appointed to the Non-Permanent Active Militia during the twelve months ended March 31, 1928, totalled 1,148.

Appointments and Retirements Permanent Active Militia

The resignations and retirements of officers of the Permanent Active Militia totalled 13.

During the same period there were 11 appointments to new commissions.

List of Officers—Militia Service and Air Service

A new Part I of the "List of Officers, Militia Service and Air Service" corrected to the 14th April, 1927, was issued. This publication contains information pertaining to all military organizations, their localization, officer personnel, etc. A further revised edition is now badly needed, and will, it is hoped, be made available at an early date.

A revised issue of Part II containing the war service of officers, list of officers carried on the Reserve of Officers, as well as other special lists, corrected up to the 31st December, 1927, was also made available.

Both of the above books of reference are essential for use by the various staffs and commanding officers throughout the Dominion. Since the war, and on the grounds of economy, revised issues have been curtailed to an annual issue for Part I, and biennial for Part II. As soon as this can conveniently be arranged, more frequent editions of these publications should be made available, as the present infrequent distribution is insufficient for the needs of the service.

(4) Medical

Permanent Force

The duties of the Medical Corps have, of necessity, been much the same as during the preceding year, although expanding in some Branches, more especially in the work pertaining to the Navy and Royal Air Force.

In the past, the Medical Services at the Naval Depot, Halifax, have been carried out by a part-time C.A.M.C. Officer. It is now proposed to place the Naval Medical Arrangements of the District under the District Medical Officer, and have the duties performed by the R.C.A.M.C.

The Medical Services of the Naval Depot, Esquimalt, are directly under the R.C.A.M.C.

Medical work in connection with the R.C.A.F. has been extended to correspond with the growth of that Branch.

Special arrangements were made for the R.C.A.F. and R.C.C.S. Detachments in the West.

Special equipment and training of Medical Personnel was provided for the R.C.A.F. Detachments accompanying the Hudson Bay Straits Expedition.

Eleven new Ambulance cars are being provided for use in the different Districts and one six-wheeled Ambulance car for use of the R.C.A.F. at Camp Borden. This is the first of its kind in Canada.

The Hospital situation remains the same at last year. Dieted Hospitals are in operation in all Military Districts, except Nos. 2, 7, 12, and 13, where the work is done either by the Civil or D.S.C.R. Hospitals.

An increase in the Establishment of Nursing Sisters has permitted of one being detailed for duty at the Military Hospital, M.D. No. 1, which has greatly increased the efficiency of this Institution.

Non-Permanent Active Militia

During the year there were 81 Officers and 10 Nursing Sisters appointed to the C.A.M.C.

Eight Field Ambulances with a total of 227 all ranks, trained at local Headquarters for a period of nine days and 12 Field Ambulances with a total of 366 all ranks, trained for a period of nine days at various Camps.

Medical Mobilization equipment has been thoroughly overhauled and the necessary repair work done to keep it in good condition.

Having considered it advisable to place Central Medical Stores in charge of a Quartermaster, who is a registered pharmacist, this action was taken, and such a step is now proving its value. The policy of manufacturing certain preparations locally has been adopted, and it is found that many of these can be put up at a much lower cost than they could be purchased for in the open market.

There has been a gradual expansion of the work of the National Defence centres of the St. John Ambulance Association, and 308 awards were made to candidates who passed the necessary examinations. In this connection, arrangements have been made for an award for each Military District, to be known as the Mary Otter District Trophy, the team winning the District Trophy being eligible to compete for the Shield known as the Mary Otter Trophy. In this way, encouragement is given to enter into the work of the Association.

(5) Pay Services

Permanent and Non-Permanent Active Militia and Royal Canadian Air Force

1. The operation of the Pay Services in connection with the Permanent and Non-Permanent Active Militia and the Royal Canadian Air Force, including the payment of troops and accounts for supplies, transport, maintenance, repairs, constructions, etc., and the keeping of accounts in the Military Districts, continued to be carried on efficiently by the small detachments of the Royal Canadian Army Pay Corps stationed at National Defence Headquarters and at the Headquarters of the several Military Districts.

2. The operation of the Pay Services during the fiscal year was somewhat similar to the previous year, there being no changes of note.

3. The work of mustering and paying the Non-Permanent Active Militia troops training at such Camps of Instruction as were held, and the issue of Annual Allowances and other financial matters relating to Units of the Non-Permanent Active Militia, have been carried out by District Paymasters in a satisfactory manner, and the members of the Royal Canadian Army Pay Corps and the Civil Staff employed under this Directorate carried out the duties assigned to them during the past year to the satisfaction of all concerned.

4. The undermentioned financial statements, comprising Appendix "B," cover the fiscal year ending March 31, 1928, and show the expenditure by Stations on account of Pay and Allowances for the Permanent Active Militia and the Royal Canadian Air Forces:—

I. Statement of expenditure by Stations on account of pay and allowances of the Permanent Active Militia for the fiscal year 1927-28.

II. Statement of expenditure by Districts on account of pay and allowances of the Royal Canadian Air Force for the fiscal year 1927-28.

(6) Records

During the fiscal year under review, the personnel of "Records" was reduced by ten.

A. Documents Section.

During the year 796,408 sets of documents were examined and refiled, in order to complete Honour Rolls and Memorials for various public and private organizations, and to complete Records of Service for Officers and other ranks, also to reply to inquiries received.

Statistics compiled by means of Hollerith included Honour Rolls for counties, cities and towns throughout Canada, and progress was made on the Book of Remembrance.

Work in the C.E.F. Registry has been facilitated by consolidating and rearranging cabinets, and office space, 144,673 files being handled in current work, and 33,908 loose papers and correspondence being received by the Directorate.

All C.E.F. Pay Documents are now consolidated and filed with other C.E.F. records. It was necessary during the year to make 11,000 researches of pay lists, part II orders, cheques and various ledgers and vouchers in order to reply to inquiries received concerning pay matters.

B. Honours and Awards.

The issue of medals and awards shows a decrease, due to the falling off of applications for war medals. The number of Memorial Plaques and Scrolls issued was however, thirty per cent greater than in the previous year. Applications for replacement of lost war medals continue to increase.

That interest in the Non-Permanent Active Militia is still being maintained by the older members of that force is shown by the fact that the award of the Colonial Auxiliary Forces Officer's Decoration and Long Service Medal has increased approximately fifty per cent.

Considerable research was necessary in order to furnish information regarding decorations awarded, in connection with the preparation of Memorial Tablets and Honour Rolls requested by public and private institutions and individuals throughout Canada.

C. Estates.

Two hundred and thirty-eight new Estates amounting to $47,549.53 were received for distribution, and 235 Estates with a total disbursement of $43,474.30 were wound up. Seven hundred and sixty-two Estates with a total credit of $132,353.81 still await distribution. There are trust accounts in 115 Estates covering shares due to 147 infant children and amounting in all to a balance of $19,613.20.

The offer of the representatives of the Russian Red Cross Society in Canada and the U.S.A. to assist in the disposal of the Estates of Russian Nationals has been accepted by the Department, and it has been found that this offer is of material advantage in establishing communication with the next-of-kin in Russia and obtaining proof of identity.

D. Graves Registration.

One hundred and seventy-four thousand, three hundred and forty-five Cemetery and Memorial Registers have been despatched to the next-of-kin to date. The Memorial at Menin Gate has been completed and was unveiled last summer, and the next-of-kin are now being furnished with the Registers in connection with this Memorial. The work in connection with the Canadian Memorial at Vimy is progressing, the architect in charge of this Memorial

having been furnished with some 5,000 names by the Department. This Memorial will commemorate 11,400 Canadian soldiers who fell in France and whose graves are unknown.

Reports of exhumation and reburial are still being received from overseas and 1,341 post-war deaths in Canada are recorded.

Headstones for 409 graves have been ordered for erection, bringing the total to date for stones ordered to 7,334.

(7) Extracts From the Report of the Commandant, Royal Military College of Canada

The College reopened on the 31st August, 1927, when the incoming class joined. The remainder of the College rejoined on the 6th September, 1927.

Strength

Recruits joining College August 31st, 1927		65
Cadet strength at beginning of Term		200
Recruits withdrawn in September 1927	4	
Gentlemen Cadets withdrawn between opening of College and Sept. 30th, 1927	2	
		6
		194
Further Recruits joining in September 1927		6
One G.C. previously withdrawn permitted to rejoin		1
Total Cadet strength at commencement of (or shortly after) College year 1927-28		201
Increase over Cadet strength at commencement of College year 1926-27		18
Left during the year for various reasons		6

Distribution by Provinces

The distribution of Gentlemen Cadets by Provinces (including the Graduating Class) is as under:—

Ontario	95
Quebec	42
British Columbia	22
New Brunswick	8
Manitoba	8
Nova Scotia	5
Alberta	5
Saskatchewan	3
Abroad	7

Discipline

The discipline throughout the term under report has been satisfactory.

The Senior Under Officer, the Under Officers, and N.C.Os have performed their duties conscientiously, and have co-operated with the Company Officers in their work.

Medical

The health of the Gentlemen Cadets during the period covered by this report has been excellent.

Commissions

The following commissions have been applied for by Gentlemen Cadets:—

Regular Army	Nil.
Royal Canadian Artillery	2
Royal Canadian Engineers	3
Royal Canadian Ordnance Corps	1
Royal Canadian Army Service Corps	1
Royal Canadian Air Force	3

Educational

Results.—Of 31 Gentlemen Cadets comprising the First Class, 4 have graduated with honours, 13 have completed graduation, and 14 will be required to write one or two supplementary examinations.

In the Second Class 19 Gentlemen Cadets have passed, 15 require one or two supplementary examinations, and 4 have failed.

In the Third Class 33 Gentlemen Cadets have passed, 19 require supplementaries.

In the Fourth Class 37 Gentlemen Cadets have passed, 25 require supplementaries, and 12 have failed.

Progress.—The Instructional Staff, both Superior and Subordinate, has worked conscientiously and efficiently throughout the year. It is very gratifying to be able to report that the co-operation and co-ordination of the members of the Staff and the various departments has continued to improve. There is now little, if anything, to desire in this respect. The progress made by the various classes, considering the College as a whole, has been average.

Accommodation.—The new Mechanical Laboratory has been completed with the exception of the installation of machinery and apparatus. This equipment is in the process of being moved and installed, and should be ready for use at the beginning of the coming term.

Riding Establishment.—The progress in Riding during the year has been progressive and compares favourably with past years.

General

Concessions to Graduates.—The Council of The Nova Scotia Barristers Society have agreed to—"Accept Graduates of your College on all subjects of our preliminary Law Examination without further examination by us here." This now leaves only Prince Edward Island and New Brunswick still to grant this concession.

Civil Employment.—The members of the Graduating Class, other than those taking commissions or going to Universities, have all been successful in obtaining employment in their selected vocations.

The following companies, etc., have offered positions to graduates:—

Pulp and Paper Companies.
Department of Mines.
Department of Interior.
Chartered Accountants.
Trust Companies.
Insurance Companies.
British Colonial Office—For appointments—Police Probationers, Sub-Inspectors of Constabulary and Railways.
Various individual business houses.

Officers' Courses.—(a) In addition to instruction given to the Gentlemen Cadets, the General Staff Branch of the Royal Military College have conducted the following courses this term, as well as the preparation of precis for, and examination of, papers of the Militia Staff Course:—

(*a*) Staff College Preparatory Course.
(*b*) Refresher Course.
(*c*) Long Course.

This staff has also prepared the examination papers for promotion of Lieutenant-Colonels of the Non-Permanent Active Militia.

Staff College Preparatory Course.—(b) This course commenced on the 1st October, 1927, and terminated with the examinations in the middle of February, 1928.

Five officers of the Permanent Force—3 Captains and 2 Lieutenants and Brevet Captains attended.

The standard of requirements for the Staff College examination is very high. Three of the candidates displayed energy and ability well up to the average. The remaining two candidates did not, through lack of previous preparation, application or natural ability, do so well. The results of the examination have not yet been received.

Refresher Course.—(c) This course ran concurrently with the Staff College Preparatory Course from October to Christmas.

Two officers of the Permanent Force and one officer of the Royal Canadian Air Force attended this course.

These officers worked well and conscientiously, and there is no doubt that they personally and the Service generally has derived considerable benefit from the course.

Long Course.—(d) The Long Course commenced on the 28th February and terminated on the 2nd June, 1928.

Two officers of the Royal Canadian Corps of Signals and two officers of the Non-Permanent Active Militia, one of whom was repeating it, attended this course.

Three of the four officers did very well, have shown good advancement, and passed the examination.

Naval and Military Tournament, Montreal, 1928

A party of 4 Officers and 95 Gentlemen Cadets proceeded to Montreal for the Naval and Military Tournament, May 17 18 and 19, and on Sunday the 20th the Gentlemen Cadets took part in the Montreal Garrison Church Parade.

The work of the Gentlemen Cadets was very favourably commented on both by the Press and private individuals.

Administration

Messing.—The quantity and quality of the messing has been satisfactory.

Clothing.—The Tailor Shop has been operated most satisfactorily, and the costs of clothing have been reduced as follows:—(*a*) Furnishings 10 per cent (*b*) Uniforms 19 per cent.

Grounds and Buildings

The condition of the grounds and buildings has been maintained throughout the year. Periodic painting was provided for, and repairs have been carried out.

Water Supply

A new chlorine gas water purifier was put in to replace an out of date apparatus. The weekly tests by the Health Department show the water supply to be pure.

Competitions with Empire Institutions

R.M.C. Kingston vs. R.M.C. Sandhurst Rifle and Revolver.—Our Rifle and Revolver teams were again successful in the annual competition 1927, against the Royal Military College, Sandhurst. The scores were as follows:—

	R.M.C. Kingston	*R.M.C. Sandhurst*
Rifle	1,016	1,013
Revolver	298	276

Sports

The Hockey Team visited the United States Military Academy, West Point, on February 18, and were successful in winning by 8 to 3.

On November 5, 1927, the Harrier Team took part in the Intercollegiate Race at Toronto, in which event we obtained second place.

The remaining College teams were not able to win championships this year, being beaten by Loyola College in very hard, close games by a small margin in both Football and Hockey.

The class of Basketball played is improving each year. The Soccer team played in the local league and made a very good showing considering the age and experience of their opponents.

With the new Tennis Courts allowing more chance for practice it is hoped that the Tennis Team will be considerably strengthened.

Aquatic Sports, Squash and Golf are favourites in their seasons. The running track will be widened and reconditioned during the summer holidays.

Presentations

Tennis Courts.—Through the kindness of Sir Frederick Williams-Taylor, donations have been received from Ex-Cadets, parents and friends of the College, for the purpose of providing tennis courts for the Gentlemen Cadets. One tennis court was laid last Autumn with the object of seeing how it would stand the winter's frosts and spring thaws. After going into the matter fully this spring, it was decided that this court did not quite fill the College requirements, and arrangements were made to have four concrete courts laid this spring. This work is now completed. If it is found that sufficient funds remain, it is intended to have an "En-tout-cas" court laid this year, where Cadets who are on the different teams can practice.

"Tommy" Smart Cup.—The members of the 1927 Graduating Class presented to the College a Silver Cup in memory of the late No. 1716 Gentleman Cadet Thomas Williams Smart, to be awarded annually to the best all-round Cadet in Athletics.

Hooper Cup Miniatures.—Mrs. G. R. Hooper, widow of the late Colonel G. R. Hooper (Ex-Cadet No. 63) has donated a sum of money for the creation of a trust fund for the provision of a miniature of the Hooper Cup, to be presented annually to the Gentleman Cadet winning the Hooper Cup. Heretofore no miniature cup was given in this connection.

Photographs, R.M.C. Sandhurst and R.M.A. Woolwich.—A handsome album has been received from the Royal Military College, Sandhurst, containing photographs of the grounds and activities of the Gentlemen Cadets. A set of photographs was also received from the Royal Military Academy, Woolwich.

Poisoned Arrows, etc.—A collection of poisoned arrows (these have been sterilized), spear heads, battle axes, pipe bowls, fishing lines, etc., the property of the late Captain W. G. Stairs (R.E.) (Ex-Cadet No. 52) have been presented to the College by his brother, Mr. H. B. Stairs of Halifax, N.S.

Books.—Mr. Francis McLennan has presented the College Library with further bound volumes of Blackwoods Magazine. The undermentioned have kindly presented books to the College Library during the year under review:—

Lieut.-Colonel H. S. Stewart. (Ex-Cadet No. 465).
Lieut.-Colonel T. C. Skinner. (Ex-Cadet No. 127).
Dr. G. H. Clarke, Professor of English Literature at Queen's University.
Dr. J. C. Webster, B.A., M.D., F.R.C.P.E., F.R.S.C.
Lieut.-Colonel R. O. Alexander, D.S.O.

Memorial Tablets.—A bronze memorial tablet, presented by Mr. V. I. Smart, has been placed in the Educational Building in memory of his son the

late Gentleman Cadet T. W. Smart (No. 1716), who was accidentally killed during Football practice in October, 1926.

Mr. Algernon Ridout of Neilsonville, P.Q., presented to the College a memorial tablet in memory of his Father the late Captain J. B. Ridout, 90th Light Infantry, Captain of Cadets from 1876 to 1882. This was unveiled during the closing exercises by Lieut.-Colonel Duncan MacPherson (Ex-Cadet No. 18), a member of "The Old Eighteen".

Dinghy.—Major S. B. Coristine (Ex-Cadet No. 623) has kindly presented the College with a new Dinghy.

Canoes.—The following Ex-Cadets have made donations for the purpose of providing new canoes for the Boat Club:—

Lieut.-Colonel G. G. Blackstock, M.C.		(Ex-Cadet	No. 888)
Lieut.-Colonel E. G. Hanson, D.S.O.		"	No. 667)
James W. Domville, Esq.		"	No. 216)
A. F. Nanton, Esq.	One Canoe	"	No. 752
C. S. Hanson, Esq.		"	No. 764
A. T. Paterson, Esq.		"	No. 890
C. P. Pitblado, Esq.		"	No. 893
N. H. Macaulay, Esq.		"	No. 944
H. M. Paterson, Esq.		"	No. 1219
H. C. MacDougal, Esq.		"	No. 1695

It is intended to mark these Canoes with the names of their donors, not only as an appreciation, but as a means of bringing to the attention of the serving Cadets the spirit of good-will and interest displayed by their predecessors.

Visitors

During the past year the College has been visited by the following:—

August, 1927: About two hundred ladies and gentlemen from Kent County, Ont., who were attending a convention in Kingston.

September, 1927: Eighty members of the British Newspaper Society, England.

During the meeting of the General Synod of the Church of England in Canada, the members were invited to visit the College, most of whom accepted the invitation.

The Hon. Lucien Cannon, Solicitor-General.

The Most Rev. S. P. Matheson, D.D., LL.D., D.C.L., Archbishop of Rupert's Land and Primate of Canada.

October, 1927: The Rt. Rev. Bishop J. Taylor Smith, K.C.B., C.V.O., D.D., Northwood, Middlesex, England, late Chaplain General of the British Forces during the Great War, visited the College and addressed the Staff and Gentlemen Cadets.

The Hon. Wm. Phillips, U.S. Minister, Ottawa.

The Hon. Senator R. Dandurand, P.C.

November, 1927: Members of the Eastern Ontario Women's Institute Convention.

W. A. Boys, Esq., M.P., Barrie, Ont.

December, 1927: Brigadier-General Sir Gordon Guggisberg, K.C.M.G., D.S.O., late Governor General of the Gold Coast, who gave a lecture to the Staff and Gentlemen Cadets on West Africa.

Major G. D. Rhodes, C.B.E., D.S.O., R.E., Nairobi, Kenya Colony.

February, 1928: The Hon. Peter Heenan, Minister of Labour.

May, 1928: H.E. The Most Reverend Andreas Cassulo, D.D., Papal Delegate to Canada and Newfoundland.

Their Excellencies, The Governor General of Canada and Lady Willingdon.

Members of the Ontario Medical Convention.

REPORT OF THE QUARTERMASTER GENERAL

The appropriations for the year 1927-28 for Engineer, Supply and Transport, and Equipment and Ordnance Services were sufficient only to meet the actual requirements of these services for upkeep purposes which have during the year been satisfactorily maintained.

Engineer Services and Works

The attached report of this directorate indicates the work which has been carried out during the year, and a general improvement in conditions has been obtained.

It is essential that Permanent Force barracks be erected in Military District No. 2 within the next four years when the present arrangement with the city of Toronto regarding Stanley Barracks expires.

The arrangements in Calgary under which the Permanent Force units occupy a portion of the Non-Permanent Active Militia Armoury are most unsatisfactory to both branches of the service. The stable accommodation for the cavalry which is rented from the Municipality, is a great fire risk. These being only temporary wooden buildings, do not afford proper protection for the horses or the means of carrying out proper instruction in stable management. New barracks and fire-proof stables should be erected at as early a date as possible.

The barrack situation at Halifax remains unchanged. All the buildings are obsolete and expensive to administer.

Magazine accommodation for Naval, Military and Air Force has been further improved during the year. The Naval portion of the Joint Service Magazine at Bedford Basin is now approaching completion. It is hoped to be able to carry out considerable work on the Military and Air Force accommodation during the coming year.

The Petawawa Magazine for Military Districts 1, 2, 3 and 4 will be completed during the coming year.

Investigations have been carried out towards selecting a suitable site for a Magazine in Western Canada to serve Military Districts 10, 12 and 13. It is hoped that a site may be definitely selected in the near future.

The improvements to the Ordnance Building, Kingston, have been completed and this building is now occupied, providing excellent accommodation with very little fire risk.

The rifle range situation has also been improved. Many important points remain without suitable ranges. It is hoped that year by year this situation will be met.

A new central training depot for the Royal Canadian Air Force, with suitable buildings and aerodrome, is required to replace that now occupied at Borden, this site having been found unsuitable for the purpose. A number of sites have been inspected.

A much needed building has been erected during the winter months at Connaught Ranges.

A large amount of work has been carried out in developing the new Air Force Aerodrome at Rockcliffe, Ottawa.

Considerable work has been carried out for R.C.A.F. stations at Shirley Bay, Victoria Island, and outlying points in Western Canada.

Considerable work of an advisory nature has been carried out by Engineers of this Department in connection with the proposed flying field near Montreal.

A detailed report of the Engineer Services is attached (page 59).

Royal Canadian Army Service Corps

It is gratifying that the improvement in the organization and administration of this corps has continued during the past year. The routine work of distribution of rations and forage to both Permanent and Non-Permanent militia, control of horse, mechanical and military water transport, allotment of buildings and the provision of rented buildings, together with the supply and control of fuel, light, water, etc., and the supervision of all rail transport has been satisfactory.

Schools of Instruction have been well administered and the special course in Mechanical Transport which has been carried out in Winnipeg, will have a very far-reaching effect not only upon the service, but upon the personnel who have received valuable instruction which will be of use to them on their return to civil life.

The development of mechanization which is being experimentally carried out in Great Britain is being closely watched. Funds at present do not permit of any expansion in this regard in this country.

There has been a slight increase in the cost of both rations and forage during the past year due to the rise in cost of certain types of articles.

A detailed report of this service follows (page 67).

Equipment and Ordnance Services

The Ordnance Stores in charge of this service are in good condition and some improvement has been made in connection with their housing, at several points. Fireproof buildings are, however, required at a number of stations before this valuable property can be considered to be properly safeguarded.

Surplus and obsolete stores and clothing to the value of approximately $12,000 have been disposed of through the Government Salvage Officer, by sale or transfer, during the past year.

Purchases of clothing have been confined to articles urgently required owing to the depletion of certain sizes. These purchases will increase yearly on account of depletion of war stocks.

The use of coloured clothing is restricted as follows:—

Permanent Force.—Each detachment of the combatant units has a sufficient supply to enable a limited guard of honour or escort to be turned out.

The Non-Permanent Active Militia are permitted to clothe their bands in coloured uniforms from those retained in their possession from pre-war issues, or by purchase from their own funds. There is very little pre-war coloured clothing in stock, no purchases having been made since the war.

The Permanent Force for ordinary purposes, are restricted to the use of khaki and have no change for walking out purposes. They are permitted to purchase a blue uniform at their own expense, for evening wear. It is hoped that in the near future it will be possible to provide our Permanent soldiers with an issue of coloured uniform to be worn when not on duty.

The Non-Permanent Active Militia are, generally, anxious to return to coloured uniforms, and as the war stocks of khaki are becoming depleted, the time is arriving when this question should be considered.

Camp equipment on a rental basis is issued to Boy Scouts and Girl Guides. The rate charged does not entirely cover depreciation but it is hoped to be able to continue this issue in view of the enormous value of these camps in the physical development of our young people.

Certain articles of camping equipment are also rented for public purposes at a cost which practically covers depreciation.

Some improvement has been possible in connection with equipment for the Signalling Service and for specialized training in Artillery and Machine Gun work.

Reports of shortages of material of various types are prepared annually and provision is made from time to time as funds can be supplied.

The work of the Dominion Arsenal, Quebec, during the past year has been maintained at a high standard.

Expenditure of Small Arm Ammunition on annual practice has during the past year been slightly higher than that manufactured. It is hoped that funds will be provided to increase the annual output during the coming year. This would considerably reduce the cost of production of the individual articles.

The work of the Chief Inspector of Ammunition and that of the Inspector of Armourer Services has been well carried out.

A detailed report on this service follows. (Page 70.)

(1) Directorate of Engineer Services

Definition of Duties

Engineer Services comprise the design, construction and maintenance of fortifications, military buildings and works; also the custody of lands owned or used by the Department of National Defence. It is also the duty of the Royal Canadian Engineers to operate and maintain the defence electric lights (search lights) and the telephone systems in permanent fortifications.

Staff

Under the Quartermaster-General, the Director of Engineer Services is responsible for the proper carrying out of all Engineer Services, and administers the sum voted by Parliament under the heading "Engineer Services and Works, Militia Services," and all Engineer Services for the Royal Canadian Air Force.

The Director of Engineer Services is assisted by a small staff at Headquarters, who are employed on inspection duties and the preparation and supervision of important constructional projects, as well as on their ordinary administrative duties.

A District Engineer Officer is appointed to the Staff of each Military District. He is responsible to the District Officer Commanding, for the proper execution of Engineer Services within his District. He has a staff of officers and other ranks of the Royal Canadian Engineers to assist him in the performance of his duties of design, supervision and administration; the size of the staff depending on the amount of work in each District.

Notes on Engineer Services Generally

During this year certain services which were postponed in the year 1926-27 owing to lack of funds have received attention, so that the condition of Military Works and buildings has been somewhat improved as regards upkeep, but there still remain for attention many services of an urgent nature for the preservation of existing buildings and works or for the proper accommodation of units in occupation.

Rifle Ranges

The existing rifle ranges have been reconditioned as far as possible with the funds available and are generally in fair repair. In certain cases the danger areas are inadequate and unless additional areas are secured, firing will have to be discontinued on account of danger to the public.

The lack of rifle range accommodation pointed out in previous reports still exists, and militia training is consequently seriously handicapped.

Accommodation, Permanent Active Militia

The situation regarding new barracks for the Permanent Active Militia remains unchanged, as funds have not been found to provide the accommodation urgently required at Toronto, Halifax and Calgary.

The stable accommodation for mounted corps at many stations is very poor and constitutes a grave fire risk. At Winnipeg present conditions cause considerable hardship to both men and horses—new brick stables for the Artillery at this point are urgently needed. The temporary wooden stables at Calgary are very undesirable.

Accommodation for Non-Permanent Active Militia

Many units of the Non-Permanent Active Militia lack armoury accommodation, space for drill in inclement weather, and storage facilities. This reflects adversely on efficiency, and makes organization more difficult.

No funds have been provided for the erection of armouries. The policy of renting and adapting buildings which are really unsuitable for this purpose is both expensive and inefficient.

Existing armouries have been maintained in a fair state of repair, but owing to the shortage of funds available their condition can nowhere be said to be first class.

Expenditures 1927-28

ENGINEER EXPENDITURES FROM MILITIA SERVICES

(Engineer Services and Works and General)

Maintenance and repairs of Rifle Ranges	$ 87,128 74
Maintenance and repairs of Barracks	267,320 34
Maintenance and repairs of Ordnance Buildings	64,745 59
Maintenance and repairs of Drill Halls	117,375 32
Maintenance and repairs of Camp Grounds	100,842 33
Maintenance and repairs of Fortifications	65,028 25

New Construction

Halifax Magazine	$ 100,000 00
Stores Building, Petawawa	12,600 00
Magazine, Petawawa	22,757 90
Competitors' Building, Connaught	26,030 00

The distribution of expenditure on Engineer Service funds was as follows:—

Military District No. 1	$ 36,500 00
Military District No. 2	50,484 28
Military District No. 3	70,795 14
Military District No. 4	44,664 00
Military District No. 5	79,605 00
Military District No. 6 and Halifax Garrison	180,239 92
Military District No. 7	23,701 52
Military District No. 10	70,374 97
Military District No. 11	27,996 00
Military District No. 12	6,000 00
Military District No. 13	30,869 63
Petawawa Camp	33,000 00
Ottawa	13,068 54
Connaught	35,141 57

Engineer Expenditures from other Appropriations

MANUFACTURING ESTABLISHMENTS

Dominion Arsenals, Lindsay and Quebec	$ 10,058 55

ROYAL CANADIAN AIR FORCE

Construction and repair of buildings for the Air Force	$ 130,928 78

ROYAL MILITARY COLLEGE

Repairs and maintenance	29,506 75

NON-PERMANENT ACTIVE MILITIA

Temporary works in connection with camping arrangements such as water supply, latrines, ablution tables, kitchens, incinerators, preparation of camp sites, etc.	36,303 25

PERMANENT FORCE

Fire Protection, water supply, chimney sweeping, etc.	2,218 95

NAVAL SERVICES

Naval Services, repairs to R.C.N.V.R. quarters	91 85

Work carried out 1927-28

The following is a list of the more important works carried out during the year, in addition to the usual services for maintenance and minor repairs (exclusive of the works shown under "New Construction").

Military District No. 1

London, Ont., rifle range.—Additional targets and repairs.

Wolseley Barracks.—Concrete basement floor and reconstruction of quarters.

Ordnance Building.—Concrete floor.

Armoury.—Renewals to electric lighting system and repairs.

Chatham, Ont., Armoury.—Renewals to electric lighting system.

Renovations to Armouries at Galt, Guelph, Kincardine, Sarnia, St. Thomas, Walkerton, Watford and Windsor, Ontario.

Military District No. 2

Camp Borden.—Converting and refitting 21 buildings for quarters; installation of central heating plant in hospital buildings; repairing roofs and flooring of buildings and improving aerodrome; workshops and storage for M.T. Section.

Toronto, Ont., Long Branch Rifle Range.—Repairs to buildings and water supply.

Armouries, Hamilton and Toronto.—General repairs.

Rifle ranges, Brantford, Collingwood and Camp Borden.—General repairs.

Temporary Camps.—Services for temporary camps were provided at Long Branch, Brantford and Owen Sound.

Military District No. 3.

Kingston, Ont., Ordnance Depot.—Completion of "B" Block, involving new truss roof, concrete floors, new heating system, new plumbing, shelving, racks, etc. Ready for occupancy; considered one of the best buildings.

Armoury.—Renewal of retaining wall.

Tete du Pont Barracks.—Alterations to quarters.

Artillery Park Stables.—Renewal of roof.

Lindsay, Ont.—Repairs to armoury and arsenal building.

Barriefield Camp and Rifle Range.—Repairs to equipment and to water supply system.

Military District No. 4.

Pointe-aux-Trembles Rifle Range.—Installation of electric light system and general repairs to range equipment.

St. Johns Barracks.—General repairs to buildings and stables.

Westmount, R.C.O.C. Depot.—New fire protection and inter-phone systems.

Sherbrooke Rifle Range.—Repairs to fences and equipment.

Armouries.—General repairs to Craig Street. Engineer and Grenadier Armouries in Montreal, and to Westmount, Three Rivers, St. Hyacinthe, Sherbrooke and Coaticook Armouries.

Military District No. 5.

Quebec.—General repairs and renewals were carried out to the following buildings: Armoury, Citadel; Officers' quarters, St. Louis Street; Quarters of District Officer Commanding; Connaught Barracks; Citadel; Ordnance buildings; St. Louis Barracks; Military Hospital; Dominion Arsenal and to Citadel walls and City Fortification Walls.

Little River Proof Butts.—Parts destroyed by fire were renewed.

Lévis, Nos. 1 and 2 Forts.—New power line and services on buildings.

Bury, Armoury.—Indoor rifle range installed.

Armouries, Beauport and Thedford Mines.—Repairs.

Temporary Camps.—Camps for Militia training were equipped at Richmond, Cookshire and Rimouski.

Military District No. 6.

Halifax, Magazine.—Ten new buildings completed; new electric power line and distribution system.

Halifax, N.S.—General repairs and renovations were carried out for the following buildings: Glacis Barracks; Pavilion Barracks; Military Hospital; South Barracks; White Building and Wharf, Engineer Yard; Married quarters Melville Island; Sackville Street Married quarters; Married quarters Bedford Row; Military Gymnasium; Ordnance buildings and the armouries, and general maintenance and repairs to the Fortifications.

McNabs Island.—Four huts reconditioned and pier reconstructed.

R.C.A.F. Station.—New concrete ramp in front of hangar and improvements to store building.

Charlottetown, P.E.I., Armoury.—Indoor rifle range constructed and repairs carried out.

Aldershot Camp.—Repairs to stables, grounds, rifle range and buildings.

Sydney Mines, Armoury.—Construction of indoor rifle range.

General repairs were carried out to the following buildings: Truro and Bridgewater Armouries and Ordnance Buildings at Charlottetown.

Truro Rifle Range.—Renewal of markers' shelter.

Military District No. 7.

Sussex, N.B., Rifle Range.—Six additional targets constructed, with additional stop butt, firing points, etc.

Armouries.—General repairs were carried out to the Armouries at Fredricton, Saint John and Sussex.

Rifle Ranges.—General repairs to ranges at Moncton, Saint John and Fredericton.

Sussex Camp.—Water pipes renewed, parade ground levelled and repairs to drains, buildings and electric light system.

Military District No. 10.

Brandon Rifle Range.—New caretaker's quarters erected and range repaired.

Winnipeg, Fort Osborne Barracks.—New concrete walks, steel fire escapes erected, new magazine and incinerator and general repairs to sixteen buildings; improvements to heating system.

R.C.A.F. Station, Red River.—New building erected and wireless station moved.

R.C.A.F. Headquarters.—Additional fire protection.

Rifle Range.—General repairs.

Camp Hughes.—New engine and pump for water supply, roofs of buildings renewed and repairs to caretaker's quarters.

Lac du Bonnet, R.C.A.F. Station.—Three new buildings erected and roof of present building repaired.

Cormorant Lake, R.C.A.F. Station.—New mess building erected.

Ladder Lake, R.C.A.F. Station.—Five new buildings erected.

Portable metal buildings were provided at eight R.C.A.F. Stations.

Armouries.—General repairs were carried out at McGregor Street Armoury, Winnipeg, and at the Minnedosa and Virden Armouries.

Military District No. 11.

Esquimalt, B.C., Work Point Barracks.—Renewals and repairs on account of damage by fire; improvements to supply store.

Ordnance Buildings.—New cordite testing building.

Fortifications.—General repairs; renewals to water and electric light systems.

Vancouver, Jericho Beach Air Station.—General improvements to services.

Armouries.—General repairs carried out to armouries at Vancouver (Beatty St.); North Vancouver; Kaslo and Rossland.

Temporary camps for Militia training were equipped at Kelowna, Kamloops, Beacon Hill, Rodd Hill and North Vancouver.

Military District No. 12.

General repairs and improvements were carried out to Maple Creek, Moosomin and Prince Albert Armouries and general repairs to the Regina Rifle Range.

Temporary camps for Militia training were equipped at Regina Beach, Prince Albert, Yorkton, Gull Lake, Paynton and Harris, Sask.

Military District No. 13.

Sarcee Camp.—New officers' mess building; general repairs to buildings; improvements to rifle and artillery ranges.

Rocky Mountain House, Air Station.—New landing field constructed; new building for air mechanic.

High River Air Station.—Renovation of buildings.

In addition, four emergency landing fields have been constructed and equipped.

General repairs were carried out on the Armouries at Calgary, Edmonton, Vegreville and Red Deer, and on the Calgary Rifle Range.

Temporary camps for Militia training were equipped at Sarcee, Cooking Lake and Redcliffe, Alberta.

Connaught Rifle Range.

The usual services necessary in connection with the Canadian Small Arms School and meetings of rifle associations were carried out. Improvements to roads, buildings, range machinery and sanitary arrangements were made. Construction of a new road and improvements to buildings and range equipment were carried out, and a new Competitors' building also erected.

Ottawa Drill Hall.

Renovation of quarters and minor services.

R.C.A.F., Shirley Bay.

Erection of new hangar and quarters.

R.C.A.F., Victoria Island.

Erection of new hangar and repairs to buildings.

R.C.A.F., Rockcliffe, Aerodrome.

Removal of stop butts and levelling of grounds.

Lands

The following is a list of Military Properties disposed of during the fiscal year 1927-28:—

Stoney Creek, Ont., drill hall.—Sold to the Parry Sound Basket Company for $250, October 10, 1927.

Bowmanville, Ont., drill hall site.—Reconveyed to the town of Bowmanville, June 20, 1927.

Halifax, N.S., Fort Clarence.—Sold to Imperial Oil Limited for $19,100, June 17, 1927.

Halifax, N.S., Old Headquarters Office.—Sold to Young Women's Christian Association for $7,750, September 27, 1927.

Valcartier, P.Q., part lot 113.—Sold to United Church for $125, November 22, 1927.

Barriefield, Ont., rifle range, 20 acres.—Sold to Mrs. Mary Brooks for $1,500, January 27, 1928.

Three Rivers, P.Q., rifle range, 22 acres.—Sold to La Communauté des Religieuses Ursulines for $5,000, February 13, 1928.

Kenora, Ont., drill hall site.—The former site was exchanged with the Board of Education of the town of Kenora for adjoining property, November 29, 1927.

Fredericton, N.B.—Part of the present parade grounds were exchanged with the Department of the Interior for adjoining property, Order in Council dated January 10, 1927.

Quebec, P.Q.—Lots 142 and 143 Cove Fields transferred to the Department of the Interior by Order in Council dated April 11, 1927.

Kingston, Ont., water lots, Cataraqui.—Transferred to the Department of the Interior by Order in Council of April 20, 1927.

Saint John, N.B., Lower Cove Reserve.—Clearance rights quit claimed to the city of Saint John, March 28, 1928.

The following is a list of Military properties acquired during the fiscal year 1927-28:—

Saskatoon, Sask., rifle range.—Two hundred and seventy-nine acres purchased for new site for $9,725, May 27, 1927; 80 acres transferred for danger area from the Department of the Interior.

Winnipeg Aerodrome.—Additional lots purchased for $3,900.

Newcastle, N.B., drill hall site.—Additional lot purchased for $350, April 12, 1927.

Sussex, N.B., rifle range.—Additional land, 71·93 acres, purchased for $3,331, March 12, 1927.

Moose Jaw, Sask., rifle range.—Six hundred and twenty-five acres purchased for new site for $9,123.70. January 31, 1928.

Action is being taken for the acquisition of the following properties:—

Rockcliffe Aerodrome.—Purchase of additional land.

Lac du Bonnet Air Station.—Purchase of site.

Vancouver, B.C., rifle range.—Purchase of new site.

Quebec, P.Q.—Purchase of burial plots, Mount Hermon Cemetery.

ROYAL CANADIAN ENGINEERS

Duties

1. The Director of Engineer Services is also the Officer Administering the Corps of Royal Canadian Engineers. The functions of the Royal Canadian Engineers are:—

(*a*) To operate the Defence Electric Lights, telephones and machinery of the fortresses of Canada.

(*b*) To instruct the Non-permanent Active Militia and Gentlemen Cadets of the Royal Military College in Military Engineering.

(*c*) To execute or supervise Engineer Services throughout Canada.

(*d*) Other military duties of an engineering or general character (viz: duties in aid of the Civil Power).

The Officer Administering Royal Canadian Engineers and District Engineer Officers, in their respective spheres, give advice on technical matters connected with the organization and training of the Engineers of the Active Militia. The District Engineer Officers in nearly all cases act as the instructors in Military Engineering at the various Provisional Camp Schools (Engineers) held for the training and qualification of Officers and Other Ranks of Active Militia (Engineers).

Officers.

The present shortage of officers in the Royal Canadian Engineers makes it difficult for them to carry out all these duties in an entirely satisfactory manner. When one officer has to perform duties in connection with Engineer Services, and, at the same time, give instruction in Military Engineering, both of which are specialist employments, it is impossible to attain full efficiency in either.

Out of a present Officer strength of 29, six are "On Command"—one as Assistant Director of Military Intelligence, one at the Staff College, Quetta, India, two attending the School of Military Engineering, Chatham, England, one on exchange duty at the Royal Military Academy, Woolwich, England, and one with the Geographical Section, General Staff, National Defence Headquarters, Ottawa. There are four vacancies for subalterns.

No more officers can be spared from the Royal Canadian Engineers for extra-regimental employ without gravely prejudicing the conduct of Engineer Services, and impairing the Engineer training. A number of subaltern officers are urgently needed.

Other Ranks.

The present strength of W.Os., N.C.Os. and Sappers is ten under the authorized Limited Establishment. This is due to the high qualifications as tradesmen that are now required, and also to there being a great demand for labour in the building and construction trades in civil life.

A shortage of suitable candidates for training for the very important duties of Military Foreman of Works is beginning to make itself felt. Candidates in the past have been drawn from N.C.Os. and Sappers who are building or constructional tradesmen, and who possess the necessary intelligence and initiative. With the failure of the supply of tradesmen, the supply of potential Foremen of Works also fails. This group is at present eight under establishment. There is also a shortage of suitable candidates for draughtsmen. Candidates in the past have been drawn from N.C.Os. and Sappers who enlisted as draughtsmen or from those who had a certain amount of training in this subject. No candidates are at present available; the present establishment of this group is two under strength.

Training

The function of the Royal Canadian School of Military Engineering at Halifax, is,—

(*a*) To provide instruction for Officers and Other Ranks of the Royal Canadian Engineers in their duties, and by examinations, to determine whether they possess the requisite technical qualifications for promotion, or for certain special appointments.

(*b*) To qualify W.O's. and N.C.Os. of the Royal Canadian Engineers as Instructors in Military Engineering, for duty with the Instructional Cadre or with the Corps.

(*c*) To hold courses for the qualification of Officers and N.C.O.s. of the Canadian Engineers (N.P.A.M.) and to set and correct examinations for Provisional or Camp Schools of Engineering held in other parts of Canada.

The functions of (*b*) and (*c*) above imply a certain degree of centralization. It is considered that this is advantageous, as it ensures uniformity in Military Engineering training, and the latest developments in materiel and method are made known to all concerned.

The location of the Royal Canadian School of Military Engineering in Halifax is not sufficiently central. Heavy expense is incurred in transporting Royal Canadian Engineer personnel from other parts of Canada to take courses there, and it has proved impossible to send Canadian Engineer personnel there from other points than those within the Maritime Provinces. When accommodation permits, the Royal Canadian School of Military Engineering should be moved to some point in Ontario.

When it becomes possible to increase establishments of the Permanent Active Militia, a Field Coy. R.C.E. should be organized. All things considered, the present organization of the R.C.E. in detachments is the most efficient for carrying out the duties of the Corps with the numbers available, but the lack of a field unit has an adverse effect on the training of R.C.E. Officers and Other Ranks in field engineering and general military duties. Those who have served in the Great War know how a field company is organized and functions, but those who have joined since have no opportunity of learning. This is bound to affect the training of the Non-Permanent Active Militia, in turn. The Field Company, if organized, should be in the same locality as the Royal Canadian School of Military Engineering, for demonstration and instructional purposes.

The courses given to R.C.E. personnel at the Royal Canadian School of Military Engineering are:—

Foreman of Works
Works Sergeants
Mechanist Electrician
" Machinist
" Instrument Repairer
Engineer Clerks
" Draughtsman
Instructor in Military Engineering, Class I and Class II.
Defence Electric Lighting: Engine Drivers, Gas and Oil, Searchlight Operators.

A R.C.E. Permanent School of Instruction was held during the year at Esquimalt, for the qualification of Officers and N.C.Os. of the Active Militia (Engineers).

R.C.E. Permanent Schools may, if necessary and if sufficient candidates are forthcoming, be authorized to be held at other convenient R.C.E. stations, i.e. Toronto, Winnipeg, and Esquimalt, at which stations the necessary Qualified Instructors are available.

These R.C.E. schools, are branch schools and are under the jurisdiction of the Commandant, Royal Canadian School of Military Engineering, Halifax.

(2) Directorate of Supplies and Transport

This directorate is responsible for the provision, administration and distribution of all food, forage, fuel, light, disinfectants, transport by rail, water and road; horse transport, mechanical transport, military water transport, remounts, veterinary services, rental of buildings (in conjunction with the Department of Public Works), telephone services, the allotment, appropriation of barracks and barrack services.

The strictest possible economy in all services has been observed, consistent with efficiency, and all services are operating at a minimum strength.

The following is a brief outline of the services rendered:—

Supplies for Troops and Horses

(Permanent and Non-Permanent Active Militia)

One thousand nine hundred and sixty-two contracts for various supplies and services have been made during the past year by the Contracts Branch, at the request of this directorate. The following supplies were issued:—

Food rations	715,182
Hospital diets	25,567
Forage rations	254,136

Few complaints were received as to the quality of the food and forage provided by the contractors, and the prices were considered fair and reasonable.

The average cost per ration of food was ·0101075 cents higher and per ration of forage ·037033 cents higher than last year, due to natural fluctuation in prices from year to year.

The following is a comparison of the cost per ration during the last five years:—

Food		*Forage*	
March, 1924	$0·31377	March, 1924	$ 0·29614
March, 1925	0·29801	March, 1925	0·36142
March, 1926	0·331045	March, 1926	0·364509
March, 1927	0·339849	March, 1927	0·369480
March, 1928	0·3499565	March, 1928	0·406513

Lighting and Heating of Buildings

Supplies of fuel, and the kinds and quality of the coal delivered by the contractors were in accordance with the department's specifications. Canadian coal is used wherever practicable. Anthracite is used only where municipal regulations or the type of equipment, chimneys, etc., prevent use of bituminous coal. Coke was used to a larger extent, where the type of heating apparatus was suitable for its use and compared very favourably with anthracite coal, being very efficient and economical. Tests of various types of Western coals for the new self-feeding furnaces at Fort Osborne Barracks were carried out.

The supply of light to all buildings has been satisfactory and economical.

Transport by Ocean and Rail

The provision of ocean transport is confined to personnel proceeding to and returning from England, in connection with courses of instruction. All accounts for such ocean transport together with miscellaneous accounts for rail transport, are handled in this directorate.

This directorate is responsible for the issue of all rail transport in Canada, the issue of which is kept at a minimum. The railways are continuing to give satisfactory service in connection with the movement of troops to and from annual training camps.

Horse Strength—Permanent Active Militia

On March 31, 1928, the total number of horses in the Permanent Force, including Cavalry, Artillery, Infantry, Army Service Corps, and other Units, was 664. Some difficulty is experienced in obtaining remounts of a suitable type for cavalry, artillery and other military purposes. The prices remain practically the same, except in the Prairie Provinces where remounts are considerably cheaper than in other parts of Canada. The Department of Agriculture maintain seven breeding stations: Roddick Lake, P.Q.; Chaffey's Locks, Ont.; Millarville, Alta.; Ailsa Craig, Ont.; Brampton, Ont.; Russell, Man.; Kamloops, B.C.

Where such breeding stations are in operation, the remounts from these localities are of a type noticeably superior and it is recommended that one breeding station should be opened in each province to improve the quality of remounts for military service and to raise the standard of saddle horses for which there is a large and increasing demand.

Veterinary Service

This branch of the service is responsible for the care and health of horses, and the duties in connection with this service have been very satisfactorily carried out, although the establishment has been reduced to a minimum.

Telephones

By careful supervision, and by the installation of extension telephones instead of main telephones wherever possible, the expenditure for this service has been maintained at the lowest cost, without in any way interfering with the efficiency of the service. For the year 1927-28, the total cost for this service throughout the various districts was $17,481.45.

Barrack Services

Included under this heading is the proper conduct of all duties in connection with the receipt, custody, issue and accounting for fuel, light, gas, water, disinfectants and paillasse straw, and also for the allotment of quarters.

The Royal Canadian Army Service Corps

The strength of this corps on March 31, 1928, was 26 Officers and 249 Other Ranks.

This corps functions throughout the Dominion for the purpose of providing, administering and accounting for supplies, forage, fuel, light and disinfectants; transporting troops, animals and stores by rail and water, appropriating, allotting and hiring accommodation for both the Permanent and Non-Permanent Active Militia.

The Royal Canadian Army Service Corps (Permanent Force) is also employed for the instruction of the Canadian Army Service Corps (Non-Permanent Active Militia).

To meet these demands and requirements, a small depot or detachment is located in each Military District, and the Officer of the R.C.A.S.C. designated as the District Supply and Transport Officer is attached to the District Headquarters.

The Depots, numbering four in all, in addition to their normal duties, provide Royal and Provisional Schools of Instruction for the training of the R.C.A.S.C. and C.A.S.C.

Depots are located at Halifax, N.S.; London, Ont.; Winnipeg, Man.; and Esquimalt, B.C.

Detachments are located at Toronto, Ont.; Kingston, Ont.; Montreal, Que.; Quebec, Que.; Saint John, N.B.; Regina, Sask.; Calgary, Alta.; and Ottawa, Ont.

A small R.C.A.S.C. Supply Depot to provide for supplies, barrack services and fuel for the R.C.A.F. and Permanent Force at Camp Borden was organized during the early part of 1927.

Training and Instruction

In order to impart instruction in the latest developments and to ensure uniformity in training, and a systematic application of rules, regulations and methods in Army Service Corps procedure, a Royal Canadian Army Service Corps School of Instruction is maintained at Winnipeg, Man., where all training throughout Canada is carefully supervised.

All young officers on joining the corps, on first appointment, are posted to Winnipeg for instruction in corps duties, and finally, for training in regimental duties, before being posted for duty elsewhere.

Courses of instruction for officers, senior W.O's and N.C.O.'s, and the training of the Instructional Cadre is carried out at this school. Ample accommodation exists for attached personnel to live in barracks, and by degrees the instructional facilities, so very necessary for imparting thoroughly practical instruction in all branches of corps duties, are being built up. As Cavalry, Artillery, Infantry and Air Force detachments are quartered at this station, an opportunity is afforded to work with and obtain the assistance of the other arms of the service.

Branch Schools, under the direct supervision of the R.C.A.S.C. Central School at Winnipeg, Man., are established at Halifax, N.S.; London, Ont.; and Esquimalt, B.C., for the purpose of providing Royal and Provisional Schools of Instruction for Officers, W.O.'s, N.C.O.'s and men of the C.A.S.C. (non-permanent) in the Districts where C.A.S.C. Units are situated, and also for the instruction of the junior N.C.O.'s, men and recruits of the R.C.A.S.C. personnel at the Depots.

These Branch Schools have done very useful work in the various Districts. The standard of instruction has been high, up to date, and on the same general lines as laid down by the Central School. Apart from the qualifications that have been obtained by the N.C.O.'s, men and recruits of the Depots, the C.A.S.C. (non-permanent) have derived the greatest benefit and encouragement, with the result that the *esprit de corps* of the A.S.C. has been greatly raised.

Since the opening of the Central Royal Canadian Army Service Corps School of Instruction at Winnipeg, Man., in September, 1925, all the officers, with very few exceptions, and a very high percentage of the W.O.'s and N.C.O.'s have attended during the non-training season courses of instruction, varying from two to four months' duration, in drill, pack-saddlery, wagon drill, equitation, supplies, barrack services, mechanical transport, Corps duties, duties and discipline, interior economy and other Corps and technical subjects. This central instruction has had a very noticeable effect upon the R.C.A.S.C. (Permanent Force) throughout the Dominion and is reflected in a marked degree in the C.A.S.C. (non-permanent) Training. The Instructional Cadre, after three years, was again reassembled at one centre and in addition to bringing instruction up to date on a uniform basis, they have had the benefit of a special four months' course in Mechanical Transport subjects. The Instructional Cadre can now instruct in three technical subjects required by the A.S.C., namely, supplies and barrack services, Horse Transport and Mechanical Transport.

The standard of the Corps in technical and corps duties is now considered high and steps have been taken to ensure continuity of education by laying down a yearly program of instruction to be followed.

The Corps was very weak in Mechanical Technical subjects. A very careful classification of the personnel was carried out, and after eighteen months of upgrading and elementary instruction, four officers and twenty-two other ranks were selected to undergo a special Mechanical Transport course of four

months' duration at Winnipeg. This is the first Mechanical course undertaken in Canada and was conducted by a technical Mechanical Transport Officer (Imperial) on loan from England. The method and procedure of this instruction will serve as a guide for future Mechanical Transport courses. The results were very satisfactory. Now that this personnel has returned to various stations throughout the Dominion, far-reaching benefit and a high standard of efficiency is to be expected.

The mechanization of military forces is absorbing the attention of all nations and great strides have been made in this sphere. The introduction of six-wheelers, a form of vehicle with most of the qualities of a track or semi-track vehicle, plus all the advantages of a wheel vehicle, has given an impetus to mechanization to such an extent that mechanical vehicles are making their appearance in the first line transport of fighting units, where the horse was once considered indispensable.

As far as the very limited funds will permit, every effort and opportunity has been taken to keep abreast of the time in this particular field.

Last summer, a ten days' extensive experiment and test in conjunction with Field Artillery was made with track and semi-track tractors against a four-wheel drive vehicle of the latest type over varied and difficult terrain. All this equipment was placed at the disposal of the Department free of cost by the firms interested. Very interesting and useful data was made available by these trials.

During last summer and winter a six-wheeler has been manufactured in Canada. Experiments, trials and tests have been made in deep snow and much useful data has been obtained for future reference.

The Department has acquired two of the latest War Office six-wheelers, one medium and one light. These vehicles have been put to very severe tests and the manner in which they surmounted difficult obstacles was remarkable. Further trials with artillery will be made this summer, and during the winter snow trials will be conducted.

Inspections

Inspections by the Director of Supplies and Transport of all the R.C.A.S.C. Depots and Detachments were carried out with the object of insuring uniformity in their professional training, supply, transport and barrack service arrangements, equitation, drill, equipment and organization; also the efficient and economical conduct of these services.

These inspections have been of inestimable value both to the Inspecting Officer and to the O.C. Depots and Detachments of the R.C.A.S.C.

A second inspection of all Depots and Detachments has now been completed and a marked improvement and a higher standard of efficiency was noticeable in all Branches of the Corps.

(3) Directorate of Equipment and Ordnance Services

The provision and distribution of clothing, equipment, arms and ammunition for Militia Services and of clothing and non-technical stores for the Royal Canadian Air Force have been successfully carried out during the year.

Priced Vocabulary of Stores and Clothing

This important publication gives the correct nomenclature for all stores and clothing and shows the cost of the articles listed. The publication has been kept up to date during the year both as regards prices and nomenclatures. Very considerable changes were made to bring the Vocabulary in line with that in use by the War Office.

Steel Helmets

In the last report it was stated that 7,000 steel helmets were purchased from the War Office Surplus Stocks, at a disposal price which was $13,000 less than the value at Vocabulary rates. During the year 1927-28 an additional 11,000 helmets were obtained also at disposal prices. These two lots of this important item of War Equipment were thus secured for an amount less by $34,000 than the value at Vocabulary prices.

Clothing

During the war the pattern of jackets, serge drab, was changed to roll collar to conform with the War Office pattern. Previously straight collar jackets were worn. On reviewing the situation during the past year it was found that there were very considerable stocks of large and small sizes of straight collar jackets but no intermediate sizes. There were objections to using both patterns of jacket in one unit. It was decided to cut down a number of the large size garments to fill in intermediate sizes and issue certain units with full issue of straight collar jackets. Arrangements were made to have 7,000 of these altered and as a result, on the basis of the standard size roll approximately 40,000 jackets can now be used. The cost of alteration was $31,500 and the value of the 40,000 jackets is approximately $320,000. As further stocks of intermediate sizes are required, it is proposed to carry on with alterations until all the stocks of straight collar jackets are used up.

During the year this branch has been able to procure the following equipment at very much reduced prices:—

(a) Buff Leather Equipment

The equipment purchased was serviceable part worn and is very difficult to obtain except by special manufacture. The net saving effected in the transaction was approximately $24,000.

(b) Rifles S.M.L.E. Mark III

Six hundred rifles were purchased at a total cost of approximately $5,800. The price of these arms delivered in Canada by the War Office would have been approximately $22,000 or approximately $16,000 saving. These were arms which had previously been disposed of by War Office as surplus. They were examined by War Office armourers and passed as serviceable before shipment.

Highland Regiments

During the year four Infantry Regiments were converted into Highland Regiments. These Regiments were: Prince Edward Island Regiment, Cumberland Regiment, Essex Fusiliers, and Lanark and Renfrew Regiment.

The cost of the Highland doublet, Glengarry and kilt supplied to these units is equal to the cost of ordinary khaki uniform. These units supply all other articles at their own expense.

Cordite

During the past year a contract was arranged with the Canadian Industries, Limited, for the supply of 155,000 pounds of cordite for use in the manufacture of Small Arm Ammunition. This is really the extension of a previous contract. Delivery is to be made over a period of five years.

It is considered sound policy to maintain a plant in Canada for the making of cordite rather than to purchase from War Office stocks. The value of this plant during the late war cannot be over estimated.

Dominion Arsenal, Quebec

During the past year the output of the Dominion Arsenal Quebec included the following items:—

Cartridges, S.A. Ball .303 Cordite Mark VII	5,443,402
Cartridges, Q.F. 18-pdr. case, empty Mark III	13,591
Primers, percussion Q.F. Cartridges No. 1 Mk. II	28,479
Rifles, aiming, .22" Q.F. 18-pdr. Mk. I to II, Guns (Mark I)	15
Cartridges, filled B.L. or B.L.C. 15-pdr. 1 lb. 4 oz. blank	5,000
Cartridges, Q.F. 6" Gun short filled 15-pd. 15 oz,. Cordite M.D. 26 with adapter, Mark I	300
Cartridges, Q.F. 12-pdr. 12 cwt. filled 2 lb. Cordite M.D. 11 with adapter Mk. III	982
Cartridges, Q.F. 6-pdr. cordite M.D. practice Mark L.P.	494

In addition manufacture and repair of ammunition boxes and also repair of other ammunition was carried out.

Considerable renovation work was carried out both at the Main plant and the filling factory. Some new up to date machinery was procured during the year.

The Superintendent of the Arsenal paid a visit to the Woolwich Arsenal in order to obtain new ideas with regard to ammunition manufacture.

The Report of the Superintendent for the fiscal year 1927-28 is included in this Report as Appendix C.

Chief Inspector of Ammunition

This branch carried out the inspection and proof of all ammunition manufactured at the Dominion Arsenal, Quebec, as well as 6,904,000, cartridges .22" purchased from the trade.

Certain special investigations and tests were carried out in connection with various subjects. A test of special interest was that carried out to ascertain the best blank ammunition for use with machine guns.

Inspector of Armourers Services

The officer made a complete inspection of the armourer shops in Ordnance Depots throughout Canada. Generally very satisfactory reports were submitted.

In the workshops at Quebec the work of overhauling and repairing rifles, bayonets and scabbards received from overseas was continued throughout the year.

Disposal of Surplus Stores

Surplus and obsolete stores and clothing to the value of $11,933.92 were disposed of through the Government Salvage Officer by sale or by transfer to other Government Departments during the year.

The total amount of stores disposed of by this Department since the War, up to the 31st of March, 1928, is valued at $10,275,411.07.

Establishment of the Royal Canadian Ordnance Corps

The authorized limited establishment of the Royal Canadian Ordnance Corps as at 31-3-28 was—

Officers..... 36 (excluding seconded officers—4).
Other Ranks—436 (excluding Other Ranks—6, carried supernumerary).

The actual strength of the Royal Canadian Ordnance Corps at at 31-3-28 was:—

Officers..... 35 (excluding seconded officers—4).
Other Ranks..425 (excluding Other Ranks—6, carried supernumerary).

The distribution of the strength by trades and occupation was as follows:—

Other Ranks:—

Ammunition Examiners	5
Armament Artificers	18
Armourers	29
Artisans:—	
Blacksmiths	3
Carpenters	12
Painters	2
Saddlers	6
Tailors	3
Textile Refitters	9
Caretakers	75
Clerks and Storemen	263
Total	425

Discharges, Enlistments, etc.

The following are the particulars of Discharges, Enlistments, Transfers, etc., carried out during this year:—

Strength decrease:—	
Retirement and Discharges—	
Officers	1
Other Ranks, (for ordinary reasons, time expired, etc.)	40
Transferred to other Units	2
Promoted to Commissioned Rank	1
Desertions	3
Strength increase:—	
Enlistments	40
Transfers from other units	2
Transfers between Stations:—	
Officers	2
Other Ranks	34

Courses of Instruction

Two Warrant Officers and eight senior Non-Commissioned Officers of the Corps attended a Senior Qualifying Course at the Royal Canadian Ordnance Corps School of Instruction, Winnipeg, from the 1st of January to the 28th of February, 1928. Instruction was given in the following subjects:—

Corps Administration and Interior Economy.
Ammunition and Explosives.
Ordnance Duties generally (Peace and in the Field).
Military Law.
Infantry Drill.
Guns and Carriages, and
Electricity as applied to Service stores.

A course of instruction of six weeks duration (part-time) for Junior Non-Commissioned Officers and Men was conducted at each Ordnance Depot with one exception during the year. These courses were open to all Permanent Force Units; eighty Other Ranks attended.

During the year, caretakers' courses were conducted at Halifax, Kingston, Winnipeg, and Esquimalt. The period of these courses was four weeks and the numbers who actually attended are:—

Civilian Caretakers	11
Military Caretakers (R.C.O.C. Caretakers Section).	9

Instruction was given in the care and preservation of guns, carriages and other Artillery equipment, including harness and saddlery, also store accounting, Receipt and Issue of Stores and Ledger keeping.

Courses of Instruction, Officers

One officer of the Royal Canadian Ordnance Corps has recently completed the Advanced Class at the Military College of Science, Woolwich, and is now taking a short instructional course at the Army Ordnance Depots in England.

Another Royal Canadian Ordnance Corps' officer returned from England on March 12, 1928, after completing the Ordnance Officers Course and passing the final examination with a high standing.

Canadian Ordnance Corps (Non-Permanent)

Owing to shortage of funds very little progress was made in the training of the Canadian Ordnance Corps (Non-Permanent) during the year.

Inspections carried out by the Royal Canadian Ordnance Corps

The Director of Equipment and Ordnance Services inspected the Ordnance Depots at Kingston, Montreal, Winnipeg, Regina, Calgary and Esquimalt during the year with satisfactory results.

Inspection of all guns, howitzers, artillery vehicles, equipment, etc., on charge to units was carried out by Ordnance Mechanical Engineers and such repairs as were necessary and alterations authorized by List of Changes were carried out. Similarly all small arms and machine guns on charge to all units were inspected and repaired as necessary by Royal Canadian Ordnance Corps Armourers.

The clothing and equipment on charge to every unit of the Non-Permanent Active Militia (other than Artillery Units) was inspected by Royal Canadian Ordnance Corps Officers during the year. They were also in attendance whenever a transfer of the command of a unit took place.

Caretakers, Armouries and Drill Halls

Particulars of the number of civilian and military caretakers at present authorized are as follows:—

Military caretakers	75
Civilian caretakers—	
(Chief) Grade III	5
(Full Time) Grade II	118
(Part Time) Grade I	65
	263

The number of caretakers available is hardly sufficient. The situation is watched and the best use possible is made of the funds available, adjustments and re-allotments being made where appropriate.

REPORT ON CIVIL AVIATION IN CANADA

During 1927 a great advance in Civil Aviation in Canada was apparent. The Dominion and Provincial Governments extended the range and variety of their operations. Commercial companies more than doubled their flying time. Throughout the Dominion there has been a notable increase in flying activities generally.

Civil Government Air Operations

The Directorate of Civil Government Air Operations was formed on July 1, 1927, to undertake all flying for departments of the Dominion which had been done hitherto as part of the work of the Royal Canadian Air Force. During 1927 the following departments availed themselves of aircraft for a wide and varied range of services: Departments of Interior, Mines, Railways and Canals, Public Works, Marine and Fisheries, Customs and Excise, Indian Affairs, Agriculture, and Post Office. Units were established at: (*a*) High River, Alberta; (*b*) Winnipeg, Manitoba; (*c*) Ottawa, Ont.; (*d*) Dartmouth, N.S. Forest fire detection patrols were carried out for the Department of the Interior, Forestry Branch, over an area comprising 61,012,911 acres, in the Prairie Provinces. During the fire hazard season, 106 fires were detected and suppression action taken. All Aerial Photographic and Aerial Survey Operations are carried out in co-operation with the Topographical Survey, Department of the Interior, who receive all requests for work, issue the necessary technical instructions, and prepare the resultant maps. Close co-operation is also maintained with the Survey Services of the Provincial Governments. One hundred and sixty-three thousand photographs, covering 199,220 square miles of country, have been transferred to the Topographical Surveys for mapping purposes. During 1927, the approximate area covered was: Oblique Photography 28,650 square miles, and vertical photography 17,200 square miles. The total flying time for the season, on all operations, was 3,471 hours, an increase over 1926 of 1,177 hours 31 minutes.

High River Air Station

During 1927 a total of 193 hours 5 minutes flying was carried out over the Bow River and Crowsnest Forest Reserves for the patrol of forest land comprising 3,260,826 acres. Sub-bases are established at Eckville and Pincher's Creek. The establishment consisted of 5 officers and 27 airmen.

Flights totalling 189 hours 30 minutes were made for purposes of oblique and vertical photography. An area of approximately 2,230 square miles was photographed during 1927. The districts were Lacombe, Alberta; Melfort and Saskatoon, Saskatchewan.

Summary of Flying time.	Hrs.	Mins.
Forestry	193	05
Photographic survey	189	30
Service tests	6	15
Militia service	3	15
Transportation	2	15
Miscellaneous	7	30
Total	401	50

Winnipeg Air Station

The activities at this station included: Fire detection patrols; suppression action on fires located; air photography for surveys; forest sketching; transportation of Indian Department officials; obtaining information regarding the

distribution of wheat rust spores; dusting growing wheat to prevent rust; transportation and reconnaissance flights for various Government officials on urgent work.

During 1927 a total of 1,344 hours 25 minutes flying was carried out for the patrol and suppression of fires over an area of forest land comprising 57,752,085 acres. Sub-bases are established at Lac du Bonnet, Norway House, Cormorant Lake, Ladder Lake, and detachments at Winnipegosis for forest patrols around Lake Winnipegosis and at Ile a la Crosse for patrols between Churchill and Saskatchewan rivers in Northern Saskatchewan.

Flights totalling 600 hours 10 minutes were made for the purpose of oblique and vertical photography. An area of approximately 36,456 square miles was photographed during 1927. The districts were: Rainy Lake and Kenora, Wood Buffalo Park, Flin Flon area, Winnipegosis area east of Lake Winnipeg, and northern Alberta. The establishment consisted of 19 officers and 81 airmen.

Summary of Flying time.	Hrs.	Mins.
Forestry	1,344	25
Photographic surveys	600	10
Dusting	57	40
Transportation	9	35
Miscellaneous	16	30
Total	2,028	20

Ottawa Air Station

Photographic operations were carried out in the vicinity of Muskoka, Ont., over an area of about 3,000 square miles, and near Sudbury over an area of about 1,700 square miles.

Photograph operation over an area of 154 square miles was carried out in the district of La Tuque, province of Quebec. From La Tuque a Vedette proceeded to Baie St. Paul, carrying out exploratory oblique photography due east across the unmapped area from Batiscan river to Grand Lac Jacques Cartier.

Operations were also carried out from Lac St. Joseph, P.Q., in the Batiscan and St. Annes districts. One hundred and forty-two square miles were photographed. This detachment then proceeded to Roberval, P.Q., and carried out photographic operations near Chicoutimi, Jonquieres, Kenogami, Arvida, Bagotville and St. Alexis de la Grande Baie, parts of the Saugenay river and Ha Ha bay. Oblique photography was also carried out over the Peribonka river, around the shores of the Saguenay at the Grande Decharge and around Lake St. John, up the Ashouapmouchuan river and the Mistassini river, along Lake Kenogami, Ha Ha bay and the Saugenay river. On November 1, all aircraft from these detached operations returned to Shirley's bay, Ottawa. Operations in connection with air mail investigation were carried out by this unit. The establishment consisted of 10 officers and 32 airmen.

Summary of Operations.	Hrs.	Mins.
Photographic survey	867	07
Instruction, practice and testing	265	57
Transportation	42	13
Air mail investigation	58	56
Miscellaneous	13	05
Total	1,247	18

Dartmouth Air Station

A total of 103 hours 14 minutes flying time was carried out on vertical photography of the Shelburne area, Nova Scotia, comprising an area of 1,728 miles.

Aerial dusting was carried out in the Bras d'Or Lakes area, Cape Breton Island, to combat the outbreak of the Spruce Budworm insect pest. The flying time was 38 hours 40 minutes.

Summary of Operations.	Hrs.	Mins.
Photographic survey	157	09
Dusting	38	40
Miscellaneous	6	45
Total	202	34

Hudson Straits Expedition

The decision having been reached by the Government to complete the Hudson Bay Railway and terminals, it was decided, early in January, 1927, to send an expedition to Hudson strait to obtain accurate information in regard to ice conditions and to study the requirements necessary to ensure safe navigation. The expedition left Halifax on July 17 and arrived at Port Burwell July 27, where Base "A" was established. Base "B" was established at Nottingham Island, and Base "C" at Wakeham Bay. The general equipment of the three bases was practically the same and comprised the following: Two Fokker aircraft complete with floats, skiis and wheels for landing, and all necessary accessories, including spare engines, one 30-foot motor launch, one Fordson tractor, radio apparatus consisting of two gasoline engines to generate power with two 150-foot steel masts. Gasoline, oil, coal, stoves, bedding, etc., provisions for sixteen months, one skiff, guns and ammunition. Seven buildings comprising officers' and men's dwellings, radio house, storehouse, blubber house and two hangars were erected at each base. The expedition consisted of 44, all ranks.

Flying Operations

The first flight was made from Base "C" September 30, from Base "B" October 11, and from Base "A" October 19. Flying has been carried on since these dates, whenever the weather was favourable.

Fog and storms hampered operations. Fog was recorded on 33 days out of 137 days between July 28 and November 11.

Up to the end of the year, 26 meteorological and ice observation flights were carried out with a total flying time of 45 hours and 50 minutes.

Control of Civil Aviation

The branch of the Controller of Civil Aviation is responsible for the administration of Air Regulations; the inspection and registration of aircraft; the inspection and licensing of air harbours, and examination and licensing of pilots and air engineers. There were in Canada 21 commercial aircraft operating firms, 36 licensed air harbours, 67 licensed civil aircraft, and 148 licensed pilots and air engineers.

Statistics

The number of flights made in 1927 has increased 252 per cent over 1926, the figures being 1926, 4,755; 1927, 16,748. The hours flown have risen from 5,860 to 12,070, an increase of 106 per cent. The increase of passengers carried is particularly encouraging, showing the public is prepared to travel by air where facilities are offered. The figures are: 1926, 6,436 passengers; 1927, 18,932 passengers; 1926, 631,715 passenger miles; 1927, 1,424,031 passenger miles. In the same way freight traffic has increased from 724,721 pounds in 1926 to 1,098,346 pounds in 1927. Mail carried in 1926 was 3,960 pounds, and in 1927 it increased to 14,684 pounds.

Ontario Provincial Air Service

In Ontario the Provincial Government maintains its own air service as part of the Forestry Branch of the Department of Lands and Forests. This service owned and operated 18 aircraft. Its main base is at Sault Ste. Marie. The

flying operations are mainly in the district lying north and west of the Ottawa river, Lake Nipissing and French river. Forest fire detection and suppression patrols, forest type mapping by photography, sketching for inventory work and transportation to the outlying parts of this district were carried out in 1927. The main operating bases are at Sudbury and Sioux Lookout. The total flying time for the year was 4,861 hours; 18,000 square miles of territory was sketched from the air, 4,572 square miles photographed, and 526 forest fires detected.

Commercial Companies

In Quebec the Provincial Forest Service carry out similar work by contract with commercial aviation firms. Forest fire patrols and forest type mapping was done. Contracts were awarded to the Compagnie Aerienne Canadienne for vertical photography in the Gaspe Peninsula covering an area of 5,800 square miles. Forest sketching was carried out under contract by Canadian Airways Limited, covering an area of some 7,500 square miles. The Fairchild Aviation Company, of Grand 'Mere, P.Q., also carried out large contracts for the Dominion and provincial governments, and industrial companies.

There has been a growing demand for air transportation in the mining districts of northern Ontario, Manitoba and Saskatchewan. Mining engineers and prospectors are taking advantage of this mode of travel into the remote regions and recognize the facilities offered by commercial aviation companies. The first regular established passenger and express service was operated during 1927 by the Western Canada Airways, from Hudson throughout the northern Ontario, Manitoba and Saskatchewan mining districts. The development of mining in these regions has provided steady work at all seasons; supplies and equipment amounting to 240,000 pounds, and 950 passengers were carried by this company during the year. A large amount of flying was done by other companies in Ontario covering express and passenger carrying, aerial photography, exhibition flying and instruction.

In Saskatchewan and Alberta, a few smaller companies operated aircraft in passenger transportation, instruction and exhibition flying. In British Columbia two companies have done a good amount of flying under contract for the Provincial Forest Service and the Dominion Fishery Protection Service. In the Yukon Territories one company operated in passenger, express and mail carrying.

Air Mail

During 1927 investigations of the different factors entering into the successful operation of air mail routes were undertaken. The Postmaster General awarded five air mail contracts to commercial firms connecting districts difficult of access during the winter. These were inaugurated in December, 1927, and operated for about four months until the opening of navigation. The routes followed were: Moncton-Magdalen Islands; Moncton-Charlottetown, P.E.I., Murray Bay-Seven Islands-Anticosti; Leamington-Pelee Island, and Rolling Portage-Red Lake area. To hasten the Trans-Atlantic mails during the period of navigation of the River St. Lawrence, contracts were awarded to commercial firms by the Post Office, viz: Rimouski-Montreal-Ottawa, and Montreal-Toronto. During 1927, 10 experimental runs were made over the Rimouski-Montreal-Ottawa route, and the saving in time over the normal method of delivery was from 24 to 48 hours to such points as Montreal-Ottawa-Toronto-Winnipeg, and the west, in the case of in-coming mails. Out-going mails showed a saving of three to four days in Great Britain. Surveys for the extension of these services to Winnipeg and Western Canada are proceeding.

During 1927 the development of Empire air communications by airship took definite form. Construction of an airship harbour mooring base at St. Hubert, near Montreal, was commenced.

Flying Clubs

The Government has further encouraged aviation by deciding to assist in the formation of flying clubs in the chief centres of population. Fifteen clubs will be active in the spring of 1928. Each club will be issued with two light aeroplanes and will receive a grant of $100 for each pupil trained by the club. Each club must provide its own flying field, arrange for the services of an instructor and air engineer, and have at least thirty members prepared to qualify as pilots, and have not less than ten members already qualified.

Aeronautical Engineering Division

This division of the Air Services is responsible for all technical and engineering matters for the Air Services, and is available for consultation by all organizations operating aircraft in the Dominion.

The main subdivisions of the Aeronautical Engineering Division are: (1) Research and design, (2) Airworthiness, and (3) Aircraft inspection.

(1) Research and Design Section

This section is mainly concerned with the aircraft actually used by the department, in that it supervises the construction of all its aircraft to see that the proposals are in accordance with requirements of the department. It is also responsible for the preparation of all instructions relative to modifications necessary to aircraft in service, to the design of such accessories as may be necessitated by the requirements for military aviation, for aerial photography, or to meet special winter conditions.

This section also maintains the Drawing Office and keeps drawing records of all aircraft, and prepares all specifications for new aircraft, specifications for materials to be used in aircraft, supervises the trials of all new types of aircraft and all modified aircraft, collects and distributes technical information in the form of information circulars and technical memoranda. It is also responsible for the guiding of the research work carried out by the Air Research Committee under the Research Council of Canada.

(2) Airworthiness Section

This section is mainly employed upon checking up the design of aircraft for which applications for type certificates of airworthiness have been received by the Controller of Civil Aviation.

In addition to this routine work, this section is also required from time to time to study new methods of calculation to deal with progress in the air of aircraft construction, involving new structural methods.

(3) Aircraft Inspection Department

The Aircraft Inspection Department is divided up into a number of detachments distributed throughout the country, in order to inspect aircraft under construction at the contractor's works, and also to inspect work that is carried out in the form of major overhauls or modifications.

Aircraft Industry

The progress and development of aircraft during 1927 is as follows:—

The "Vanessa", a cabin biplane with an Armstrong-Siddeley "Lynx" or a Wright "Whirlwind" 200-horsepower radial air-cooled engine, designed to carry four passengers and pilot, was completed during the summer of 1927, but unfortunately was wrecked during the initial trials through failure of a strut fitting. The "Vista", a single-seater metal-hulled monoplane with an Arm-

strong-Siddeley "Genet" motor of 60 horse-power was completed and a number of tests carried out successfully. The "Velos", specially designed for photographic operations, was under construction. The "Vigil", a two-seater plane for forest patrol, light transportation or training, fitted for use with skiis, floats or wheels, was completed and promises to be a very successful type.

Messrs. Canadian Vickers have been busy all year and turned out a large number of aircraft, including three "Varunas", seven "Vendettes", twelve "Avro" training machines, five "Viking" hulls and a large amount of repair and reconditioning work for commercial firms.

The increased interest in aviation and the growing operations have led to the establishment of increased manufacturing facilities to meet the demand for aircraft in Canada. A number of British and American firms established branches in various parts of the country, which, it is hoped, ensure in future that the larger parts of the requirements of the Canadian market will be met by increased production in Canada.

REPORT OF THE CHIEF ACCOUNTANT

The expenditure and revenue statements and the remarks contained in this report relate only to Militia and Air Services; the Naval expenditure being dealt with in the report for the Naval Service.

Following are tables of expenditure and revenue for the fiscal years 1926-27 and 1927-28. Civil government is not included in either case, it being shown in statement No. 3, Appendix " A ".

EXPENDITURE—MILITIA, AIR AND GENERAL SERVICES

Year	Militia Votes	Air Votes	General Votes	Adjustment of War Claims	Imperial War Graves	Battlefields Memorials	Total
	$	$	$	$	$	$	$
1926-27	9,158,592	2,197,645	211,908	148,894	799,767	150,650	12,667,456
1927-28	10,166,706	3,891,861	244,204	132,630	573,419	183,067	15,191,887
Decrease	.....	.....	.....	16,264	226,348	.....	.....
Increase	1,008,114	1,694,216	32,296	.....	.....	32,417	2,524,431

CREDITS—REVENUE—MILITIA, AIR AND GENERAL SERVICES

Year	Revenue				
	Militia Services	Air Services	N.W.T. Wireless Stations	Demobilization Previous Years	Total
1926-27	319,367	9,301	24,183	8,586	361,437
1927-28	228,217	19,094	24,504	9,834	281,649
Decrease	91,150	.....	.....	.....	79,788
Increase	.....	9,793	321	1,248	.....

The following statements of expenditure and revenue will be found in Appendix " A ":—

1. Appropriation Accounts, 1927-28;
2. Revenue, 1927-28;
3. Comparative Statement of Expenditure and Revenue for ten years 1918-19 to 1927-28;
4. Expenditure on account of Adjustment of War Claims 1927-28.

The increase in expenditure over the previous year was due mainly to the following:—

Militia Votes.—(*a*) The authorization of a number of new Cadet Corps involving additional expenditure for allowances, equipment, etc.;

(*b*) Urgent and necessary repairs to military properties;

(*c*) Purchase of militia stores generally;

(*d*) Increased production of small arm ammunition to meet annual expenditure.;

(*e*) Increased training of Non-Permanent Active Militia.

Air Services.—(*a*) Increased operations for other government departments in connection with forestry fire detection and suppression; aerial surveys; investigation of forest and grain pests, etc.;

(*b*) Replacement of obsolete aircraft and purchase of additional equipment required to cope with expansion of work;

(*c*) Development of air routes and establishment of flying clubs;

(*d*) Commencement of construction of aerodrome and airship base at St. Hubert, P.Q.

General Votes.—Progress in construction of joint service magazine at Halifax, N.S.

Battlefields Memorials.—Progress in construction of Vimy Ridge Memorial.

Expenditures on account of Adjustment of War Claims continues to show a decrease. There are still, however, a number of claims outstanding for War Service Gratuity, Separation Allowance, etc., due to ex-members of the C.E.F. and their dependents. As claims are still being received, it is necessary to continue to provide for them as well as for certain other expenditures arising out of the war.

The decrease in expenditure to the Imperial War Graves Commission is due to payment of some arrears having been made during 1926-27, while the figures shown for 1927-28 represent Canada's approximate annual contribution.

The increased expenditure for Civil Government salaries for the year under review is due to the authorization of a general upward revision of salaries at the rate of $120 per annum, effective April 1, 1927.

The allocation and analysis of expenditure for Cadet Services and militia training, as well as an analysis and system of costing in connection with Radio Services, performed by the Royal Canadian Corps of Signals, were continued. This work has materially assisted in the administration of the services affected and has enabled a more effective control of funds to be exercised.

The preparation of costs and statistics for the Royal Canadian Air Force was discontinued during the year. In future, information of this nature relating to civil air operations will be compiled by the civil branch of the Air Services.

REPORT OF THE ASSISTANT DEPUTY MINISTER

Submitted herewith are reports relating to (1) Civilian Employees, (2) Printing and Stationery, (3) Central Correspondence Registry.

(1) Civilian Employees

Certain minor changes in the civilian organization of the department have been carried out during the fiscal year by the Civil Service Commission at the request of the department. A change has been made in the Air Services of the department by which the Civil Government Air Operations are brought under civilian control. Civilian establishments for this service are now under consideration by the Civil Service Commission.

The comparative table below shows the number of civilian employees, permanent and temporary, in the Department of National Defence at Ottawa and elsewhere in Canada, and the amount paid in salaries, on April 1, 1927, and April 1, 1928.

It will be observed that during the fiscal year there was an increase of four permanent employees in Ottawa, and one outside Ottawa. This increase represents the appointment of employees in the lower grades who had been performing duties of a permanent nature and whose transfer to a permanent basis was in the public interest. It will also be noted that there was an increase in the number of temporary employees, both at Ottawa and other places in Canada. These increases are accounted for by fluctuations in the number of transient labourers, i.e. workmen employed for short periods on construction and repair work.

—	Number of Employees		Amount of Salaries	
	April 1, 1927	April 1, 1928	April 1, 1927	April 1, 1928
			$ cts.	$ cts.
At Ottawa—				
Permanent	383	387	56,547 22	56,705 58
Temporary	69	73	7,012 32	9,184 13
Outside Ottawa—				
Permanent	227	228	30,591 06	32,464 73
Temporary	435	479	33,884 81	39,078 52
	1,114	1,167	128,035 41	137,432 96

These figures do not include 236 factory employees at the Dominion Arsenal, Quebec, nor 118 workmen employed at the Naval Dockyards, Halifax and Esquimalt.

(2) Printing and Stationery

Statement Showing Work Performed and Expenditure:—

—	1926-27	1927-28	Increase
Printing requisitions issued	805	981	176
Stationery requisitions issued	2,519	2,575	56
Records of sales of military books	$ 1,598 17	$ 2,320 04	$ 721 87
Expenditure for printing	$ 27,985 34	$ 28,987 53	$ 1,002 19
Expenditure for stationery	$ 10,279 50	$ 17,171 46	$ 6,891 96
Express and freight	$ 2,588 69	$ 2,768 56	$ 179 87

(3) Correspondence Registry

—	1926–27	1927–28	Increase
Files charged-out	258,550	260,682	2,132
Incoming files recorded or passed	417,593	435,681	18,088
Loose papers recovered	196,822	229,343	32,161
Files created	7,372	10,922	3,550
	880,337	936,628	

REPORT OF THE JUDGE ADVOCATE-GENERAL

COURTS-MARTIAL

During the fiscal year ending March 31, 1928, 75 District Courts-Martial were convened and held, this being an increase of 23 over the preceding year. Of this number 68 courts were held for the trial of personnel of the Permanent Force and 7 for the trial of personnel of the Royal Canadian Air Force.

Of the above number of courts-martial 51 dealt *inter alia* with offences of desertion and absence without leave, and convictions either of the offence of desertion or that of absence without leave resulted. In 8 instances the sentence awarded was that of imprisonment accompanied by that of discharge with ignominy, 7 of such sentences being commuted to detention, and one sentence of imprisonment and discharge with ignominy being allowed to stand.

Four persons, including one non-commissioned officer, were charged with the offences of offering violence, or using violent or insubordinate language to a superior officer, and a conviction resulted in each such case. Nine persons, including two non-commissioned officers, were charged with stealing or receiving stolen goods; seven of these cases resulted in convictions, and two in acquittals. Four more persons were charged with this offence in the fiscal year under review than were so charged during the fiscal year immediately preceding.

During the year under review 11 non-commissioned officers were tried by court-martial for various offences, 10 of whom were found "guilty" of the charges laid, and 1 was acquitted. During the year under review there were two instances where the finding and sentence of the court-martial were not confirmed by the confirming authority upon advice from the Judge Advocate-General, and in two further instances the finding and sentence which had been confirmed was quashed upon the instructions of the Judge Advocate-General.

It is of interest to note that in both the Permanent Force and Permanent Active Air Force only four cases of drunkenness were dealt with by district court-martial during the year.

While the increase in the number of courts-martial held is almost 50 per cent over the number held during the preceding year, such increase is not necessarily a reflection on the state of discipline, but is rather indicative of more active measures being taken towards suppressing the commission of Military and Air Force offences, as the deterrent effect of a trial by district court-martial is greater than would be the case were such offences dealt with summarily by Commanding Officers. Further, in a number of instances the accused soldier or airman elected trial by court-martial rather than a summary disposal of the case by his Commanding Officer, which election would account in some measure for the increase in the number of courts-martial held.

It is pleasing to note that the courts-martial held during the fiscal year under review indicate a substantial improvement on the part of all concerned in their knowledge of Military and Air Force law and the administration of the Army Act, the Air Force Act, and the Regulations thereunder. The number of errors and irregularities occurring in these proceedings was considerably less than the number which occurred in preceding years, and the results of the instructions and comments issued and made by the Judge Advocate-General's Office are now becoming apparent.

While there is still considerable room for improvement, nevertheless the situation during the past year, compared with that which prevailed in previous years, is noteworthy and should not be passed by without favourable comment being made thereon.

LEGISLATION

During the year under review the following Bills were drafted by the Judge Advocate-General and the necessary information and memoranda pertaining thereto were prepared in his office:—

(*a*) An Act respecting the Royal Military College.

(*b*) An Act respecting certain Canteen Funds.

(*c*) An Act amending the Militia Pension Act.

The last mentioned Act made provision whereby the Militia Pension Act was made applicable, with certain modifications, to the Royal Canadian Navy and Permanent Active Air Force. This necessitated the preparation of a considerable number of explanatory memoranda.

AIR SERVICES

Consequent upon it being decided to reorganize the Air Services by way of creating a separate Directorate to administer all Civil Government Air Operations, the Judge Advocate-General was required to advise on the procedure which should be adopted and to prepare the necessary instructions and memoranda giving effect to the policy decided upon.

Further duties were added to this office in connection with the preparation of the Standard Conditions for Light Aeroplane Clubs and, in addition, the forms of agreements with such clubs were prepared in this office and the advice of the Judge Advocate-General has been sought on numerous matters in connection with the formation and administration of these organizations.

CONTRACTS

There has been a great increase in the number of contracts which have been referred to this office, either for preparation or for advice on various matters which have arisen in connection therewith. In addition certain new forms of contracts have been prepared which are now in use, or which will be adopted shortly.

GENERAL

There has been a considerable increase in the number of general matters of various descriptions referred to the office of the Judge Advocate-General for advice or action, as well as a large increase in the number of daily interviews.

PENSIONS

The Judge Advocate-General is a member of the Pensions and Claims Board, and practically all matters pertaining to the administration of the Militia Pension Act are referred to his office for advice.

REPORT OF THE DIRECTOR OF CONTRACTS

During the financial year under review the various supplies required for the maintenance of the Naval, Military and Air Services were purchased by the Contracts Branch. On account of the expansion of the Air Service the volume of work performed was considerably greater than for any other year since the amalgamation of the three departments was effected.

Due to the difference in the nature and functions of the various services comprising the department, it was necessary to purchase a very wide range of stores. Among the more important purchased were the following:—

Uniform clothing,
Cloth, serge, frieze, and other fabrics used in the manufacture of uniform clothing,
Boots, shoes, rubbers and overshoes,
Tents, canvas, covers and flags,
Aircraft, engines therefor, and various other aeronautical equipment,
Photographic equipment,
Electrical equipment,
Wireless and telegraphic equipment,
Ordnance and barrack stores,
Armament and torpedo stores,
Rifles and ammunition,
Motor cars, trucks, lorries, ambulances, and incidental equipment for the Mechanical Transport section,
Lumber,
Paints, varnishes, cordage, tools and hardware of all kinds,
Gasoline and lubricating oils,
Raw material for the Dominion Arsenal, such as lead, copper, brass, tin, etc.
Stores for the Royal Military College,
Scientific instruments,
Food stuffs,
Forage,
Fuel,
Medical and veterinary supplies.

In addition to the purchase of the supplies mentioned above, contracts were made for the erection of buildings, rifle ranges, and other departmental works; for the converting and reconditioning of aircraft; the overhaul of aeronautical engines; for carting, snow cleaning, chimney and furnace cleaning; laundry, etc., etc.

During the year the Department purchased 109 aircraft of different types for use in forestry patrol, photographing, and training and other purposes. The engines for a large number of these aircraft were purchased as complete equipment with each machine. In addition orders were placed for 51 aeroplane engines.

There were received in the Contracts Branch during the twelve months under review about 3,100 requisitions which were prepared by the different requisitioning officers at Headquarters. These requisitions, demanding supplies of different kinds, varied as to the number of articles required, some of them containing hundreds of different items. In providing for these about 3,800 contracts were made. The value of the clothing, stores, provisions, etc., purchased to fill these requisitions was about three and one-half million dollars.

In addition to the requisitions received from the requisitioning officers at Headquarters, about 8,300 requisitions, made out at the different Stations in which Units of the Permanent Naval, Militia, and Air Forces are located, were also received. These latter requisitions covered supplies to be purchased or services carried out in places where there are one or more buildings used by the department.

All stores purchased in England and the United States for delivery to Ottawa must necessarily be cleared from customs on their arrival in bond. Within the year 765 custom entries were passed.

As in past years the Contracts Branch was called upon to purchase stores for issue to ships of the Imperial Service calling at Canadian ports, as well as for shipment to H.M. Dockyard, Bermuda.

The policy of purchasing goods of Canadian manufacture wherever possible was followed. In cases where stores unobtainable in Canada were demanded preference was given to goods of British manufacture.

Practically all supplies were purchased either in accordance with a departmental specification or a sealed pattern therefor. All stores received are subject to a very rigid inspection at the point of delivery; those which do not conform to the specification or pattern are rejected.

A great deal of the inspection work is done at the Departmental Inspection Room of this Branch, Ottawa. In some cases, however, it is necessary for the inspectors to carry out inspection at the contractors' factories. During the year the number of inspection reports covering supplies and stores purchased and examined was over 1,500, while the number of packages and cases handled was approximately 37,000.

APPENDIX A

The following are statements showing:—

(1) Appropriation accounts, 1927-28.
(2) Revenue, 1927-28.
(3) Comparative statement of expenditure and revenue for the ten years, 1918-19 to 1927-28.
(4) Expenditure on account of adjustment of war claims, 1927-28.

STATEMENT No. 1.—Appropriation Accounts 1927-28, Militia and Air Services

Appropriation	Amount Authorized	Expenditure	Appropriation Unused	Appropriation Exceeded	Remarks
	$ cts.	$ cts.	$ cts.	$ cts.	
MILITIA SERVICES:					
Main Appropriations.					
Administration	317,000 00	306,294 16	10,705 84	.....	Officers retiring and Officers taking courses.
Cadet Services	500,000 00	498,300 94	1,699 06	.....	
Contingencies	40,000 00	23,832 28	16,167 72	.....	$5,000 included in Estimates for the purchase of small parcels of land, rights of way, etc., which was not used, and savings were effected in other items generally.
Engineer Services and Works	803,900 00	802,989 09	910 91	.....	
General Stores	607,799 00	607,721 71	77 29	.....	
Manufacturing Establishments	472,395 00	469,632 04	2,762 96	.....	
Non-Permanent Active Militia	2,084,300 00	2,078,256 34	6,043 66	.....	
Permanent Force	4,800,000 00	4,797,577 91	2,422 09	.....	
Royal Military College	365,000 00	363,412 59	1,587 41	.....	
Topographic Survey	40,000 00	39,993 91	6 09	.....	
Transport and Freight	165,000 00	163,963 69	1,036 31	.....	
Total Main Appropriations	10,195,394 00	10,151,974 66	43,419 34	.....	
Miscellaneous Appropriations.					
Memorial to U.S.A. citizens who fell during the late war (members of C.E.F.)	10,000 00	9,166 24	833 76	.....	
Repairs to outside wall at Citadel, Quebec	8,000 00	5,215 00	2,785 00	.....	This work was carried out by contract at lower prices than were anticipated.
Compassionate Grant to B. D. Marwick	350 00	350 00	.....	.....	
Total Miscellaneous Appropriations	18,350 00	14,731 24	3,618 76	.....	
Total Militia Services	10,213,744 00	10,166,705 90	47,038 10	.....	
AIR SERVICES:					
Canadian Air Force (Civil)	2,140,968 83	2,140,651 95	316 88	.....	
Canadian Air Force, expended by Department Public Works	81,570 17	81,570 17	.....	.....	
Canadian Air Force (Service)	1,645,659 00	1,645,603 84	55 16	.....	
Canadian Air Force, expended by Department Public Works	24,035 00	24,035 00	.....	.....	
Total Air Services	3,892,233 00	3,891,860 96	372 04	.....	
GENERAL SERVICES:					
Civil Government Salaries (Including Statutory $10,000)	703,966 00	703,966 00	.....	.....	
Civil Government Contingencies	70,000 00	69,992 17	7 83	.....	
Civil Pensions	1,835 42	1,467 92	367 50	.....	One pensioner died during the year and one minor person became of age.
Construction of Magazine at Halifax, N.S.	100,000 00	100,000 00	.....	.....	
Total General Services	875,801 42	875,426 09	375 33	.....	
OTHER SERVICES:					
N.W.T. Radio Services—Mackenzie Basin System	150,000 00	142,736 48	7,263 52	.....	
Canadian Battlefields Memorials	200,000 00	183,067 12	16,932 88	.....	

STATEMENT No. 1.—Appropriation Accounts 1927-28—*Concluded*

Appropriotion	Amount Authorized	Expenditure	Appropriation Unused	Appropriation Exceeded	Remarks
	$ cts.	$ cts.	$ cts.	$ cts.	
Imperial War Graves Commission	573,780 00	573,419 48	360 52	.....	
Adjustment of War Claims (Militia)	190,000 00	132,630 05	57,369 95	.....	Many amounts included in the Estimates for Separation Allowance, War Service Gratuity, etc., were not paid in the fiscal year owing to difficulty in locating soldiers' dependents residing in outlying districts of Russia and other countries.
Total Other Services	1,113,780 00	1,031,853 13	81,926 87	.....	
Total Militia, Air, General and Other Services	16,095,558 42	15,965,846 08	129,712 34	.....	
STATUTORY:					
Miscellaneous Gratuities, C.S. Act	.....	1,680 00	.....	.....	
Aid to Civil Power	.....	1,928 52	.....	.....	
Total Statutory	.....	3,608 52	.....	.....	
EXPENDITURE NOT INCLUDED ABOVE:					
Flat Increases, Civil Service	.....	35,628 64	.....	.....	
Unforeseen Expenses	.....	84,959 96	.....	.....	
Total	.....	120,588 60	.....	.....	
Grand Total Expenditure (except Naval)	.....	16,090,043 20	.....	.....	

For Naval Expenditure *see* separate report of Naval Services

STATEMENT No. 2.—Revenue, Militia and Air Services, fiscal year 1927-28

MILITIA SERVICES—		
Barrack damages	$ 102 56	
Commission on pay phones	25 47	
Discharges by purchase	10,771 50	
Railway subsidies	644 38	
Refunds previous year's expenditure	7,723 31	
Rent camp equipment, etc	8,311 30	
Rent military properties	12,107 27	
Sales of ammunition, stores and clothing	4,510 63	
Sales of books, charts, maps, etc	4,155 22	
Sales of cast horses	2,070 15	
Sales of condemned stores and scrap	10,507 24	
Sales of government property	16,811 50	
Sales of government property (interest)	1,689 77	
Sales of medals and ribbons (lost and replaced)	5 45	
Snow dumping privileges	250 00	
Wood cutting privileges	133 00	
		$ 79,818 75
Pensions Act, 1901 (deductions)		128,016 62
Royal Military College cadet fees		20,232 00
Fines and forfeitures		75 00
Bank interest		74 26
Premium discount and exchange		0 43
		$ 228,217 06
Northwest Territories—Wireless stations (receipts)		$ 24,503 58
AIR SERVICES—		
Air harbour licenses	$ 125 00	
Air worthiness	385 00	
Air transportation	704 00	
Barrack damages	3 53	
Discharges by purchase	2,152 00	
Private pilots licenses	10 00	
Registration fees	370 00	
Rents	1,199 56	
Sales of aerial photos, etc	4,982 28	
Sales of surplus stores	5,966 37	
Sales government property	54 76	
Miscellaneous (refund previous year's expenditure and sundry sales)	2,441 06	
		$ 18,393 56
Fines and forfeitures		700 00
Premium, discount and exchange		0 15
		$ 19,093 71

STATEMENT No. 3.—Comparative Statement of Expenditure and Revenue (Militia and Air Services) for the ten years 1918-19 to 1927-28.

Expenditure	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28
MILITIA SERVICES—	$	$	$	$	$	$	$	$	$	$
Main Appropriations—										
Administration	297,567	360,818	368,883	356,275	316,731	319,518	299,415	295,540	298,551	306,294
Cadet Services	68,770	74,414	230,288	409,348	336,933	450,000	367,829	410,195	395,936	498,301
Contingencies	9,981	13,803	49,073	41,151	39,743	27,025	23,844	29,179	20,351	23,832
Engineer Services and Works	274,258	294,407	539,546	582,112	525,666	529,815	499,545	565,554	565,540	802,989
General Stores	.....	.....	436,450	525,959	484,134	482,622	335,448	378,033	389,151	607,722
Manufacturing Establishments	15,586	.....	689,322	696,276	437,107	445,033	415,820	419,657	419,570	469,632
Non-Permanent Active Militia	365,250	471,022	1,155,727	1,902,630	1,678,544	1,690,207	1,551,257	1,676,336	1,709,939	2,078,256
Permanent Force	1,947,304	3,088,691	5,705,736	5,882,938	5,425,105	5,125,605	4,769,339	4,775,601	4,798,121	4,797,578
Royal Military College	216,185	244,239	351,031	377,450	341,284	374,141	364,944	366,705	339,336	363,413
Topographic Survey	31,082	40,522	45,125	39,956	42,330	43,399	34,614	34,223	36,969	39,994
Transport and Freight	16,698	24,854	315,443	199,815	168,247	180,706	157,688	162,318	160,789	163,964
Total Main Appropriations	3,242,681	4,612,770	9,886,624	11,013,910	9,795,824	9,668,071	8,819,743	9,113,341	9,134,253	10,151,975
Miscellaneous Appropriations, Etc.—										
War, Demobilization and Adjustment of War Claims (Militia)	377,120,138	323,360,987	16,229,764	7,916,360	4,273,445	678,320	479,159	286,441	148,894	132,630
Canadian Battlefields Memorials	.....	7,797	164,756	137,421	180,736	108,773	195,313	180,422	150,650	183,067
Imperial War Graves' Commission	.....	.....	378,966	522,115	378,442	371,785	446,896	472,519	799,767	573,419
Wireless Stations N.W.T. (Radio Services)	.....	.....	.....	.....	.....	.....	.....	146,830	137,779	142,736
Civil Pensions	966	1,254	1,115	1,115	1,115	1,115	1,115	See Gen.	Services.	.....
Various Special Votes, etc.	10,082	17,803	6,130	1,914	467	6,155	500	17,919	24,340	14,731
Consolidated Revenue—Workmen's Compensation Act	1,148	1,411	.....	.....	.....	.....	.....	.....	.....	.....
Aid to Civil Power	.....	.....	.....	593	61,430	86,615	8,623	126,368	6,968	1,929
Toronto Barracks—Special Account	.....	.....	144	.....	78	.....	177	494	.....	.....
Total Miscellaneous Appropriations, Etc.	377,132,334	323,389,252	16,780,875	8,579,518	4,895,713	1,252,763	1,131,783	1,230,993	1,268,398	1,048,512
Civil Government—										
Salaries	189,578	202,459	212,732	551,991	540,757	See Gen. Services.				
Contingencies	18,255	18,996	19,837	25,968	15,991					
Total Civil Government (Militia)	207,833	221,455	232,569	577,959	556,748	.....	.....	.....	.....	.....
Grand Total Militia Services	380,582,848	328,223,477	26,900,068	20,171,387	15,248,285	10,920,834	9,951,526	10,344,334	10,402,651	11,200,487
AIR SERVICES—										
Main Appropriations—										
Royal Canadian Air Force—Operation, Maintenance, Training, Repairs, Civil Aviation, etc.	.....	109,464	1,583,910	1,659,842	999,983	999,390	1,102,206	1,139,848	2,197,645	1,645,604
Royal Canadian Air Force—Expended by Dept. of Public Works	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,035

Purchase of Aircraft and Technical Equipment, ground services	.....	.....	.....	.....	.....	249,788	275,122	740,767	.....	.....
Royal Canadian Air Force—Civil	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,140,652
Royal Canadian Air Force—Expended by Dept. of Public Works	.....	.....	.....	.....	.....	.....	.....	.....	.....	81,570
Civil Government—										
Salaries	.....	.....	34,369	.....	.....	See Gen.	Services.			
Contingencies	.....	.....	38,077	.....	.....					
Total Main Appropriations	.....	109,464	1,656,356	1,659,842	999,983	1,249,178	1,377,32	81,880,615	2,197,645	3,891,861
Miscellaneous Appropriations—										
Demobilization	.....	.....	351,372	.....	.....	.....	.....	.....	.....	.....
Aeronautical Reserach	.....	.....	.....	.....	5,000	.....	.....	.....	.....	.....
Grand Total Air Services	.....	109,464	2,007,728	1,659,842	1,004,983	1,249,178	1,377,328	1,880,615	2,197,645	3,891,861
GENERAL SERVICES—										
Miscellaneous—										
Civil Pensions	.....	.....	.....	.....	.....	.....	.....	1,835	1,835	1,468
Construction of Magazine, Halifax, N.S.	.....	.....	.....	.....	.....	.....	31,980	49,961	72,293	100,000
Various Special Votes, etc	.....	.....	.....	.....	.....	.....	23,612	8,234	2,060	1,680
Civil Government—										
Salaries (For Militia, Naval and Air Services as amalgamated.)	.....	.....	.....	.....	.....	666,213	648,773	685,140	687,528	703,966
Contingencies (For Militia, Naval and Air Services as amalgamated.)	.....	.....	.....	.....	.....	41,894	49,860	41,936	45,438	69,992
Total General Services	.....	.....	.....	.....	.....	708,107	754,225	787,106	809,154	877,106
REVENUE										
MILITIA SERVICES—										
Militia Revenue	35,955	.....	.....	.....	.....	.....	.....	.....	.....	.....
Casual Revenue	3,795	87,867	86,815	141,012	283,372	105,944	112,045	119,415	172,649	79,819
Royal Military College	54,428	53,599	70,107	67,315	61,999	66,105	63,975	52,645	18,239	20,232
Pensions Act, 1901	23,841	47,979	120,387	112,412	121,244	124,654	127,095	131,099	128,386	128,017
Fines and Forfeitures	.....	5,375	.....	.....	100	81	40	80	.....	75
Bank Interest	.....	.....	.....	.....	.....	.....	.....	23	72	74
Premiums, Discount and Exchange	.....	.....	.....	.....	.....	.....	.....	1	21	.....
Total Revenue, Militia Services	118,019	194,820	277,309	320,739	466,715	296,784	303,155	303,263	319,367	228,217
NORTHWEST TERRITORIES—										
Wireless Stations (receipts)	.....	.....	.....	.....	.....	.....	.....	22,226	24,183	24,504
AIR SERVICES—										
Pilots' Certificates	.....	46	78	21	8	2	4	.....	.....	10
Air Harbour Licenses	.....	.....	350	90	40	80	40	100	50	125
Air Worthiness	.....	.....	455	65	80	70	165	95	170	385
Fines and Forfeitures	.....	.....	.....	.....	.....	.....	.....	.....	.....	700
Registration Fees	.....	.....	275	75	125	120	135	95	185	370
Rents	.....	.....	842	4,817	2,299	1,019	556	600	727	1,200
Miscellaneous (Refunds Previous Years, Expenditure and Sundry Sales)	.....	.....	4,657	30,673	24,517	10,196	8,268	13,354	8,169	16,304
Premiums, Discount and Exchange	.....	.....	43	23	4	45	.....	10	.....	.....
Total Revenue, Air Services	.....	46	6,700	35,764	27,073	11,532	9,168	14,254	9,301	19,094

STATEMENT No. 4.—Adjustment of War Claims (Militia).—Statement of Expenditure for the year ended March 31, 1928.

Particulars	Amount
	$ cts.
War Service Gratuity	9,681 06
Civilian Employees	5,162 90
Freight and Cartage on Stores	16,513 81
Historical Section	22,268 16
Legal Expenses	305 34
Medals and Memorial Crosses	924 45
Estates of Deceased Soldiers	1,480 16
Ordnance Services	16,088 20
Pay and Allowances	6,024 86
Postage	1,688 99
Printing and Stationery	2,205 73
Separation Allowance	14,524 08
Washington Memorial	11,046 89
Canadian War Graves	22,002 16
Miscellaneous	2,713 26
Total for year	132,630 05
Expenditure prior to April 1, 1927, for War Services	1,559,245 090 80
	1,559,377,720 85

APPENDIX B

PAY SERVICES

Following are statements for the fiscal year showing:—

(1) Expenditure by Stations on account of pay and allowances of the Permanent Active Militia.

(2) Expenditure by Districts on account of pay and allowances of the Royal Canadian Air Force.

STATEMENT No. 1.—Showing expenditure by Stations on account of Pay and Allowances of the Permanent Active Militia for the fiscal year 1927-28.

Station	Strength all ranks 31-3-27	Strength all ranks 31-3-28	Pay and Allowances Officers and Warrant Officers	Pay and Allowances N.C.Os. and Men	Total Pay and Allowances
			$ cts.	$ cts.	$ cts.
London, Ont.	213	220	96,060 24	158,205 98	254,266 22
Toronto, Ont.	411	420	207,508 12	270,038 85	477,546 97
Kingston, Ont.	383	383	201,527 71	248,277 53	449,805 24
Ottawa, Ont.	303	299	312,134 94	247,211 07	559,346 01
Montreal, P.Q.	233	233	128,591 99	154,284 43	282,876 42
Quebec, P.Q.	259	254	92,881 41	179,667 86	272,549 27
Halifax, N.S.	555	551	279,763 40	322,962 68	602,726 08
Saint John, N.B.	53	51	44,267 34	39,845 35	84,112 69
Winnipeg, Man.	471	466	181,822 04	265,954 05	447,776 09
Victoria, B.C.	278	254	150,752 57	171,159 38	321,911 95
Regina, Sask.	47	51	37,983 80	41,887 26	79,871 06
Calgary, Alta.	162	156	94,335 45	109,312 74	203,648 19
Total	3,368	*3,338	1,827,629 01	2,208,807 18	4,036,436 19

*Does not include 97 Officers and 151 Other Ranks paid from Administration, R.M.C., Geographic Section, Cadet Services, R.C.A.F., N.W.T. and other votes.

STATEMENT No. 2.—Showing expenditure by Districts on account of Pay and Allowances of the R.C.A.F. for the fiscal year 1927-28.

District	Strength all ranks 31-3-27	Strength all ranks 31-3-28	Pay and Allowances Officers and Warrant Officers	Pay and Allowances N.C.Os. and Men	Total Pay and Allowances
			$ cts.	$ cts.	$ cts.
Toronto, Ont.	181	174	63,595 59	148,327 00	211,922 59
Ottawa, Ont.	147	254	169,375 07	161,899 94	331,275 01
Montreal, P.Q.	.....	3	3,592 51	3,486 80	7,079 31
Halifax, N.S.	12	2	5,863 18	10,323 83	16,187 01
Winnipeg, Man.	73	99	49,094 38	97,307 09	146,401 47
Victoria, B.C.	17	16	6,030 56	18,323 47	24,354 03
Calgary, Alberta	38	23	15,314 52	31,170 38	46,484 90
Total	468	571	312,865 81	470,838 51	783,704 32
Personnel of R.C.C.S., R.C.O.C., R.C.A.M.C. and Instr. Cadre paid from R.C.A.F. Funds	.....	47	20,030 93	32,046 12	52,077 05
Total	.....	.....	332,896 74	502,884 63	835,781 37

APPENDIX C

REPORT OF THE SUPERINTENDENT, DOMINION ARSENAL, QUEBEC, 1927-28

EMPLOYEES

The average number of employees throughout the year was 269

FINANCIAL STATEMENTS

1. Appropriation and Expenditure.
2. Statement of Credits and Moneys received and deposited to credit of Receiver General.
3. Distribution of Disbursements.
4. Statement of Assets and Liabilities.
5. Capital Account.
6. Statement of Production and Cost.
7. Reconciliation Statement.

APPROPRIATION AND EXPENDITURE, 1927-28

Total letter of credit	$ 431,000 00		
Balance lapsed	426 62		
Gross expenditure at Quebec		$ 430,573 38	
Gross expenditure at Ottawa		11,741 54	
		$ 442,314 92	
Less credits to current year's expenditure—			
Miscellaneous credits	7,272 63		
Miscellaneous refunds	5,203 81		
Sale of scrap	5,658 10		
		18,134 54	
Net expenditure charged to Dominion Arsenal, manufacturing establishments			$ 414,634 07
Net expenditure charged by D.E.O., M.D. No. 5, to Dominion Arsenal, manufacturing establishments			5,130 74
Net expenditure charged by D.E.O., M.D. No. 5, to Little River Proof Butts			2,935 56
Net expenditure charged to Revision of Salaries, Vote No. 535			1,480 01
		$ 424,180 38	$ 424,180,38

Statement of Credits and Moneys Received and Deposited to Credit of Receiver General, 1927-28

Petty cash	$ 0 69		
Unexpended balance, D.E.O., M.D. No. 5	731 60		
Advance by headquarters to Col. H. V. Count de Bury, travelling expenses	500 00		
Unexpended balance, travelling expenses	111 75		
Return of empties to Brown corporation	14 82		
Return of empties to West Disinfecting Co	22 23		
Return of empties to Nichols Chemical Co	73 51		
Return of empties to Canadian Industrial Alcohol Co	56 00		
Sale of components, ·303" cartridges, Canadian Industries, Limited	888 00		
Sale of components, ·303" cartridges, Dominion Cartridge Co	72 75		
Sale of cartridges, ·303" Mark VII to Canadian Industries, Limited	70 26		
Sale of scrap metal	5,658 10		
Adjustment of freight and transport	23 50		
General average; Furness, Withy Co	15 57		
Miscellaneous credits and refunds from Department of National Defence	2,092 76		
Material for bandoliers; Grant-Holden-Graham, Ltd	2,700 00		
Aiming Rifles	2,720 00		
2,468 plugs, fuze hole, 2" No. 3 Mk. V	1,480 80		
7,000 cartridges, S.A. tracer, ·303" N.C. (Z)	940 00		
		$ 18,172 34	
Credited to current year's expenditure		$ 18,134 54	
Credited to casual revenue		37 80	
Credited to manufacturing establishments, Dominion Arsenal, Quebec			$ 17,402 94
Credited to manufacturing establishments, District Engineer Officers, M.D. No. 5			731 60
Credited to Casual Revenue			37 80
		$ 18,172 34	$ 18,172 34

Distribution of Disbursements, 1927-28

Salaries	$ 59,193 96	
Wages	207,928 83	
Copper	35,453 20	
Fuel	23,669 30	
Cordite	16,895 19	
Power and light	13,684 13	
Other materials (including oils, hardware, acids, factory and chemical supplies)	18,308 36	
Engineer services	8,799 70	
Lumber	8,571 44	
Bandoliers	5,891 71	
New machinery	5,583 55	
Lead	5,103 82	
Equipment	4,458 80	
Cartage	4,367 25	
Brass rod	3,877 38	
Tool steel and small tools	2,771 13	
Gunpowder, L. G.	2,074 80	
Travelling expenses	1,857 84	
Water	1,800 00	
Foundry castings	1,705 43	
Freight and transport (except cartage)	1,436 47	
Screws, assorted, for ammunition boxes	1,371 04	
Aluminum rod	1,315 60	
Printing and stationery	1,109 48	
Telephones, telegrams and postage	839 19	
Belting	520 63	
Gasoline	406 04	
Gunpowder, R.F.G. 2	350 00	
Alcohol	273 64	
Silk cloth	227 36	
Boiler insurance	211 57	
Office furniture and fixtures	167 31	
Snow removal	81 90	
Miscellaneous	528 86	
		$ 440,834 91
Revision of salaries, Vot No. 535		1,480 01
		$ 442,314 92

Statement of Assets and Liabilities, March 31, 1928

	Assets	Liabilities
Material in stores	$ 134,237 36	
Material, value of cordite and powder transferred to D.O.O., M.D. No. 5	38,830 69	
Inventory of work in process and finished goods	112,751 21	
Land	299,000 00	
Buildings	300,033 39	
Machinery	178,648 73	
Tools and gauges	26,876 82	
Equipment, general	12,472 90	
Gauges from I.M.B	7,500 00	
Office furniture and fixtures	2,286 26	
Belting	1,573 18	
Accounts payable		$ 3,925 18
Surplus, Department of National Defence		$ 1,110,285 36
	$1,114,210 54	$ 1,114,210 54

Capital Account, 1927-28

To Balance for Net Capital, April 1st, 1927—		
Land	$ 299,000 00	
Buildings	297,005 23	
Machinery	187,724 38	
Belting	1,661 35	
Equipment, General	11,494 67	
Office Furniture and Fixtures	2,006 98	
Tools and Gauges	32,889 10	
Gauges from I.M.B.	7,500 00	
		$ 839,281 71
To Accruement in 1927-28—		
On Buildings	$ 14,492 55	
Machinery	9,544 62	
Equipment, General	4,249 23	
Belting	722 36	
Office Furniture and Fixtures	393 69	
		$ 29,402 45
		$ 868,684 16

By Depreciation in 1927-28—		
Buildings	$ 8,964 39	
Machinery	18,389 63	
Equipment, General	3,231 00	
Tools and Gauges	6,012 28	
Belting	810 53	
Office Furniture and Fixtures	114 41	
By Fire Loss on Buildings	2,500 00	
Fire Loss on Equipment, General	40 00	
Machinery transferred to C.I.A.	230 64	
		$ 40,292 88
By Balance Account for Net Capital, March 31st, 1928—		
Land	$ 299,000 00	
Buildings	300,033 39	
Machinery	178,648 73	
Tools and Gauges	26,876 82	
Equipment, General	12,472 90	
Office Furniture and Fixtures	2,286 26	
Belting	1,573 18	
Gauges from I.M.B.	7,500 00	$ 828,391 28
		$ 868,684 16

Statement of Production and Cost, 1927-28

—	Production			Net Cost	Revision of Salaries	Rate Plus Revision of Salaries	per	Gross Cost
	Quantity	Rate	Per					
Deliveries of Finished Goods								
Boxes, Ammunition, Q.F. 18-pr. C/151 Mark II	3,200	7·073978	Each	$ 22,636 72	$ 71 40	$ 7·096287	each	$ 22,708 12
Boxes, Ammunition, S.A. Pistol, H. 9 Mark III	100	3·48	each	348 00	1 10	3·491	each	349 10
Boxes, Projectile, 12 and 14 pdr. No. 1, with 62 pieces	31	8·0329	each	249 02	0 79	8·058387	each	249 81
Cartridges, S.A. Ball ·303" Mark VII	3,550,933	67·256346	1,000	238,822 84	757 05	67·46956	1,000	239,579 89
Cartridges, S.A. Ball ·303" Mark VII.—D.R.A.	150,000	69·9346	1,000	37,010 79	117 30	70·1562488	1,000	37,128 09
Cartridges, S.A. Ball ·303" Mark VII.—P.R.A.'s	379,220							
Cartridges, Q.F. 18-pr. Cordite, 9-ozs. Reduced Charge, Shrapnel	1,286	2·62918	each	3,381 13	10 72	2·637519	each	3,391 85
Cartridges, Q.F. 6-pr. Practice	506	11·67348	each	5,906 78	18 72	11·7104743	each	5,925 50
Cartridges, Q.F. 12-pr. 12-cwt. Mark I	901	8·99528	each	8,104 75	25 69	9·02379578	each	8,130 44
Cartridges, Q.F. 6-inch	300	29·94583	each	8,983 75	28 45	30·040666	each	9,012 20
Cartridges, Filled, B.L. or B.L.C., 15-pr. 1-lb. 4-ozs. Blank	5,002	0·89612	each	4,482 38	14 22	0·89896	each	4,496 60
Cartridges, B.L. Filled, 6-inch Gun, 7-lbs., Blank L.G.	121	3·20	each	387 24	1 23	3·209917	each	388 47
Cases, Cartridge, Q.F. 18-pr. Mark III	12,248	4·4419	each	54,405 00	172 50	4·4560336	each	54,577 50
Implements, Ammunition (L.P.) for Emptying Shrapnel Shells	3	1·80	each	5 40	0 02	1·806666	each	5 42
Primers, Percussion, Q.F. Cartridge, No. 1, Mark II	27,914	0·94318	each	26,327 94	83 50	0·946171	each	26,411 44
Repairs and Miscellaneous Services								
Boxes, Ammunition, Q.F. 6-pr	46	6·441	each	296 29	0 94	6·461521	each	297 23
Boxes, Ammunition, Q.F. 12-pr. 12-cwt. Mark III	95	9·9295	each	943 31	2 99	9·96105	each	946 30
Boxes, Ammunition, Q.F. 18-pr	2,721	2·2544	each	6,134 25	19 43	2·261521	each	6,153 68
Boxes, Ammunition, S.A. or Signal Cartridge, H. 1, Mark I	4,020	1·85655	each	7,463 35	23 68	1·862445	each	7,487 03
Boxes, Ammunition, S.A. Pistol, H. 9 Mark III	1,803	0·9305	each	1,677 73	5 31	0·933466	each	1,683 04
Boxes, Cartridge, Q.F. 6-inch L.S. Mark III	75	24·1393	each	1,810 45	5 74	24·215866	each	1,816 19
Breaking-down and Remaking: Cartridges, S.A. Ball, Revolver, ·455 Mk. II	529,240	25·9845	1,000	13,752 06	43 65	26·0670206	1,000	13,795 71
Cartridges, Q.F. 12-pr. 12-cwt	47	1·8279	each	85 91	0 27	1·833617	each	86 18
Cases, Powder, Metal-Lined	64	3·181875	each	203 64	0 65	3·192031	each	204 29
Chargers, Cartridge, ·303", Gauging, Reblacking and Rectifying	700,000	11·19134	1,000	7,833 94	25 15	11·227271	1,000	7,859 09
Clips, Cartridge, Q.F. 3 and 6 pdrs	506	0·109486	each	55 40	0 18	0·109842	each	55 58
Overhauling 18-pr. Ammunition:								
Transportation, Refilling, Assembling and Packing	22,040	0·368759	each	8,127 45	25 78	0·369928	each	8,153 23
Scraping and Painting Shells	28,850	0·18431	each	5,317 62	16 85	0·184903	each	5,334 47
Shot, Proof, Q.F. 18-pr	50	1·4876	each	74 38	0 24	1·4924	each	74 62
Miscellaneous Services for Chief Inspector of Ammunition				903 47	2 86			906 33
Miscellaneous Repairs for D.O.O., M.D. No. 5, (Vehicles, etc.)				1,134 17	3 60			1,137 77
				466,865 16	1,480 01			468,345 17

MANUFACTURING Establishments, Dominion Arsenal, Quebec—Reconciliation Statement, 1927-28

Inventory of work in process and finished goods, March 31st, 1927	$ 127,052 27	
Inventory of material in stores, March 31st, 1927	133,828 32	
Value of cordite and powder transferred to D.O.O., M.D. No. 5, March 31st, 1927	62,713 29	
Value of capital assets, March 31st, 1927	839,281 71	
Net expenditure by Dominion Arsenal, 1927–28, including revision of salaries	416,114 08	
Additions and renewals by engineers, M.D. No. 5, 1927–28	5,130 74	
Repairs and upkeep, Little River Proof Butts, by Engineers, M.D. No. 5, 1927–28	2,935 56	
Accounts payable, March 31st, 1928	3,925 18	
Accounts receivable, March 31st, 1927	0 26	
Machinery transferred from Lindsay Arsenal, not paid for, 1927–28	1,876 78	
Inventory of work in process and finished goods, March 31st, 1928		$ 112,751 21
Inventory of material in stores, March 31st, 1928		134,237 36
Value of cordite and powder transferred to D.O.O., M.D. No. 5, March 31st, 1928		38,830 69
Value of capital assets, March 31st, 1928		828,391 28
Finished goods delivered during year, as per production statement, March 31st, 1928		468,345 17
Bandoliers supplied to Chief Inspector of Ammunition, 1927–28		2,890 54
Value of machinery transferred to Chief Inspector of Ammunition, 1927–28		230 64
Work performed for Little River Proof Butts, Engineer Services, 1927–28		2,935 56
Fire loss on buildings and equipment, 1927–28		2,540 00
Refunds to casual revenue, 1927–28		37 80
Accounts payable, March 31st, 1927		1,667 94
	$ 1,592,858 19	$ 1,592,858 19

INDEX

PAGE

Accounts—Appropriation 89
Active Militia (Non-Permanent):
  Appointments 48
  Organization 45
  Training (Units trained at Camp and Camp Schools or local headquarters) 9
Active Militia (Permanent). See "Permanent Force."
Adjutant General, Report of 44
Air Force, Royal Canadian 41
Air Service, Civil Aviation 75
Allowances, Permanent Force 95
Appointments to Active Militia 48
Appropriation Accounts 89
Armouries, Repairs to 61
Arsenal. (See "Dominion Arsenal").
Artillery 28
Assistant Deputy Minister—Report of 83
Aviation (Royal Canadian Air Force) 41
Aviation, Civil 77
Buildings (Armouries, etc.), Repairs to 61
Cadet Services 35
Camps of Instruction, Units trained at 9
Canadian Officers' Training Corps, Certificates granted 23
Canadian Small Arms School 33
Central Registry 84
Certificates granted (Officers) 24
Certificates granted (Warrant Officers, N.C.O's and Men) 26
Certificates granted (Canadian Officers' Training Corps) 23
Chief Accountant—Report of 81
Chief of the General Staff—Report of 5
Civil Aviation in Canada 75
Civilian Employees 83
Civil Government Air Operations 75
Contracts—Report of the Director of 87
Courses of Instruction, Canada 19
Courses of Instruction Abroad 17
Courses, Qualifying and Specialist 20
Departmental Library 6
Director of Contracts—Report of 87
Dominion Arsenal, Quebec 72
  Report of Superintendent (Appendix "C") 96
Engineer Services 59
Equipment and Ordnance Services 70
Expenditure—General Remarks 81
  Adjustment of War Claims Vote 94
  Appropriation Accounts 89
  Comparative Statement 92
  Permanent Force and R.C.A.F. Pay and Allowances 95
Financial Statements (Appendix "A") 89
Financial Statements (Appendix "B") 95
Geographical Section 6
Historical Section 37
Judge Advocate General—Report of 85
Library, Departmental 6
Medical Services—Report of Directorate 49
Military Buildings (Maintenance) 61
Military Operations and Intelligence 5
Military Properties acquired 64

PAGE

Military Properties, disposed of 64
Military Training and Staff Duties 8
Militia and Air Services Revenue 91
Musketry 33

Non-Permanent Active Militia. See Active Militia, Non-Permanent.
Ordnance Services 70
Pay Services—Directorate of 50

Permanent Force—
- Establishments 44
- Pay and Allowances 95
- Strength 44
- Training 8

Personal Services 48
Physical Training 35
Printing and Stationery 83
Quartermaster-General. Report of 57
Records, Directorate of 51
Registration Office (Correspondence) 84
Repairs to Buildings, Rifle Ranges, etc 61
Report on Civil Aviation in Canada 75
Revenue, 1927–28 91
Rifle Associations 34
Rifle Ranges, Maintenance 59
Royal Canadian Air Force 41
Royal Canadian Air Force, Pay and Allowances 95
Royal Military College, Extracts from Commandant's Report 52
Schools of Instruction 20
Signal Service 29
Small Arms School 33
Supplies and Transport—Report of Directorate 67
Survey Division. See "Geographical Section".
Training, Military, and Staff Duties 8

Training—
- Active Militia 9
- Permanent Force 8
- Courses of Instruction 19

DOMINION OF CANADA

REPORT

OF

THE DEPARTMENT OF NATIONAL DEFENCE

(NAVAL SERVICE)

FOR THE

FISCAL YEAR ENDED MARCH 31

1928

150—8-28 (2001)
N.S. 65—1-18

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

OTTAWA, July 1, 1928.

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit, herewith, for the information of Your Excellency and the Parliament of Canada, the Sixth Annual Report of the Department of National Defence (Naval Service), for the fiscal year ended March 31, 1928.

I have the honour to be,

Your Excellency's most obedient servant,

J. L. RALSTON,
Minister of National Defence.

68183—2

OTTAWA, July 1, 1928.

The Honourable
The Minister of National Defence,
Ottawa.

SIR,—I have the honour to inclose herewith Annual Report of the Department of National Defence (Naval Service), for the fiscal year ended March 31, 1928.

I have the honour to be, sir,

Your obedient servant,

G. J. DESBARATS,
Deputy Minister.

REPORT

OF THE

DEPARTMENT OF NATIONAL DEFENCE

(NAVAL SERVICE)

FOR THE FISCAL YEAR ENDED MARCH 31, 1928

OTTAWA, July 1, 1928.

G. J. DESBARATS, C.M.G., M.E.I.C.,
Deputy Minister, Department of National Defence,
Ottawa.

SIR,—I have the honour to report on the Naval Service of Canada, for the fiscal year ended March 31, 1928, under the following headings:—

1. H.M.C. Ships.
2. R.C.N. Barracks.
3. H.M.C. Dockyards.
4. Naval Intelligence.
5. Naval Personnel.
6. Naval Stores.
7. Financial Statement.
8. General.

1. H.M.C. SHIPS

The following ships were in commission during the year:—

East Coast—

H.M.C.S. *Patriot*.
H.M.C.S. *Champlain*.
H.M.C. Minesweepers *Festubert* and *Ypres*.

West Coast—

H.M.C.S. *Patrician*.
H.M.C.S. *Vancouver*.
H.M.C. Minesweepers *Armentieres* and *Thiepval*.

H.M.C.S. "PATRIOT"

This ship is based on Halifax; owing to the age and the worn condition of boilers and machinery, *Patriot* was not suitable for long cruises away from her base. With the exception of a cruise of one month's duration up the gulf and river St. Lawrence, all cruises were for short periods of five or six days.

The following cruises were carried out:—

1. Training cruise to Chester.
2. Training cruise to Charlottetown.
3. Training cruise gulf and river St. Lawrence.
4. Gunnery and torpedo training cruise to Bras d'Or lakes.
5. Training cruise to Shelburne.
6. Training cruise to Liverpool.

In addition to the above cruises, gunnery and torpedo classes trained on board *Patriot* during day runs off Halifax.

1. *Training Cruise to Chester.*—On June 20, *Patriot* sailed to Chester. En route to Chester, boats crews were exercised and seamanship classes trained in navigation, including helm and compass.

During the stay at Chester the crew completed a course of training in general drill, and exercised in ship work. As *Patriot* had just completed a dock refit after having been in reserve commission throughout the winter, the entire time could not be devoted to technical training and the crew were employed part of the time in putting the ship in proper shape for her summer activities.

While at Chester the ship was open to the public and many visitors were received on board.

The ship returned to Halifax on June 25.

2. *Cruise to Charlottetown.*—This training cruise covered period from July 4 to July 9. *Patriot* arrived at Charlottetown on July 5. Seaman and W/T classes trained en route and special classes were conducted for R.C.N.V.R. ratings on board.

On July 7 the ship was inspected by His Excellency the Governor General.

While at Charlottetown, the Commanding Officer inspected R.C.N.V.R. Headquarters and ratings of the Charlottetown Half Company trained on board.

Patriot returned to her base at Halifax on July 9. On the return voyage the ship was considerably delayed by heavy fogs in the strait of Canso.

3. *Training Cruise up the Gulf and River St. Lawrence.*—*Patriot* left Halifax for Quebec on July 22, and returned to Halifax on August 22. During the cruise the following ports were visited: Gaspé, Murray bay, Quebec, Charlottetown, and Summerside.

En route from Halifax to Gaspé, Cabot straits course was followed owing to the fog conditions in the strait of Canso. Thick weather prevailed until the ship arrived off Gaspé.

Patriot arrived in Quebec on July 27, where the ship's officers took part in the official reception of H.R.H. The Prince of Wales and H.R.H. Prince George.

On July 31, the Minister of National Defence inspected the ship.

The Commanding Officer of *Patriot* inspected R.C.N.V.R. Headquarters at Quebec and ratings of the Quebec Half Company trained on board during *Patriot's* visit.

The ship returned to Halifax via Gaspé, Charlottetown, and Summerside.

Throughout the cruise, the ship's company trained in seamanship and navigation and signal and W/T ratings followed specialist classes in their respective branches. General drills were also carried out and while at Gaspé the ship's company landed and completed a route march under arms.

While at Charlottetown R.C.N.V.R. classes and R.C.N. personnel carried out boat work instruction. At Summerside *Patriot* joined company with H.M.S. *Capetown*, and joint exercises were carried out.

Inter ship competitions in whaler racing were organized on two successive days, *Patriot's* whaler crew winning on both occasions.

Patriot parted company with H.M.S. *Capetown* at Summerside on August 17, and returned to Charlottetown where she remained on training duty until August 20, when she sailed for Halifax, arriving on August 22.

4. *Gunnery and Torpedo Training Cruise to Baddeck.*—The cruise to Baddeck extended from August 30 to September 3. While en route working-up exercises in Gunnery and Torpedo were carried out. Upon arrival at Baddeck the ship launched the gunnery target left there the previous year, and towed it to Halifax, for service in gunnery practices carried out off that port.

5. *Training Cruise to Shelburne.*—The ship visited Shelburne from September 7 to September 10. During the cruise the ship's crew and the R.C.N.V.R.

ratings on board trained in evolutions and general drill. R.C.N.V.R. ratings also followed gunnery, torpedo and seamanship classes.

6. *Training Cruise to Liverpool, N.S.—Patriot* sailed for Liverpool, N.S., on September 12 and returned to Halifax, N.S., on September 16. The ship called at Chester, N S., en route. The ship's company trained in seamanship and navigation during the cruise.

7. *General.*—While in harbour between cruises continuous training was carried out on board *Patriot* in gunnery, torpedo, wireless telegraphy and signals.

While in harbour and while cruising special training classes in all branches of the service were conducted for R.C.N.V.R. officers and ratings. During gunnery and torpedo training the ship cruised off Halifax, N.S.

At all ports visited during cruises the ship was open to the public and large numbers of visitors came on board. The ship was welcomed at each port by the civic authorities who spared no effort toward the entertainment of the ship's company.

At the end of October, on completion of the training program, *Patriot* paid off into reserve as the age and worn condition of the ship rendered her unfit for further sea service.

H.M.C.S. Champlain and Vancouver.—When it became necessary to remove *Patriot* and *Patrician* from sea service, negotiations were entered into with the British Admiralty for the loan of two destroyers to replace these ships pending construction of two new destroyers for the Canadian Naval Service.

The destroyers *Torbay* and *Toreador,* which were in reserve, were loaned to the Canadian Government by the Admiralty. The Canadian Government bore the cost of recommissioning them and the cost of maintaining them in commission, no charge being made by the Admiralty for the use of the ships.

With the consent of the Admiralty the ships were renamed H.M.C.S. *Champlain* and H.M.C.S. *Vancouver* respectively.

The dimensions and armament of the ships are as follows:—

Class—Thornycroft "S."
Tonnage—1,075.
Length—266¾ (p.p.) 275¾ (o.a.) x 27′ 5″ x 10′ 5″ (mean) draught.
Armament—Guns—3 4-in. (m k IV Dir. Com. with 30° elevation.
1 2-pdr. pom. pom.
1 M.G.
4 Lewis.
Torpedo tubes—4 21-in. in pairs.
Machinery—Brown-Curtis (all geared) turbines, 2 screws.
Designed S.H.P. 29,000—36 Kts.
Boilers Yarrow—Oil.
Complement—90 officers and men.

Both ships were laid down in November, 1917, and were launched after the conclusion of the war.

The ships were not subjected to the heavy strain of war service, and the hulls and machinery are in excellent condition.

The ships were commissioned in reserve under the Canadian Government in February, 1928, at Portsmouth, and fully commissioned and manned by Canadian officers and men on March 1. Prior to their departure from England the ships were inspected by the High Commissioner for Canada, and the Commander in Chief, Portsmouth.

The ships sailed on March 17 from Portsmouth for Canada via Canary islands, Cape Verde islands, West Indies and Bermuda. Upon arrival in Canada

H.M.C.S. *Champlain* proceeded to Halifax, N.S., and H.M.C.S. *Vancouver* proceeded to Esquimalt for service.

H.M.C.S. Festubert and H.M.C.S. Ypres.—These ships are based on Halifax, N.S., and are used almost entirely for training R.C.N.R. and R.C.N.V.R. officers and men.

H.M.C.S. *Festubert* carried out the following cruises during the year:—

1. Training cruise to St. Margaret's Bay, May 17-20.
2. Training cruise to Shelburne, May 25-30.
3. Training cruise to Sheet Harbour, June 25-28.
4. Training cruise to Chester, July 29-August 1.
5. Training cruise to Hubbards Cove, August 12-15.
6. Training cruise to Chester, August 27-30.

H.M.C.S. *Ypres* completed the following cruises:—

1. Training cruise to St. Margaret's Bay, May 17-20.
2. Training cruise to Shelburne, May 25-30.
3. Training cruise to Chester, August 9-12.
4. Training cruise to Sheet Harbour, August 12-15.

The ships cruised in company to St. Margaret's Bay and to Shelburne.

While cruising R.C.N.V.R. officers and ratings trained in gunnery, seamanship, navigation, signals and wireless telegraphy.

While in harbour training classes were conducted in general ship work, seamanship, mine sweeping and boat pulling.

During the cruise of H.M.C.S. *Festubert* to Chester in July a special class of R.C.N.V.R. officers trained in navigation and pilotage.

During October H.M.C.S. *Festubert* was employed in company with H.M.C.S. *Patriot* assisting in gunnery exercises off Halifax, N.S. *Festubert* towed *Patriot's* targets for full calibre firing and acted as target ship during torpedo exercises.

In addition to the regular training cruises, both H.M.C.S. *Festubert* and H.M.C.S. *Ypres* carried out daily runs off Halifax, on training duty. Both ships remained in full commission throughout the year.

H.M.C.S. "Patrician"

H.M.C.S. *Patrician* is based on Esquimalt. During the year the ship completed the following cruises:—

1. Pelagic sealing patrol to Queen Charlotte islands.
2. Torpedo training cruise to Comox.
3. Cruise to Seattle.
4. Gunnery training cruise to Port Renfrew.
5. R.C.N.V.R. training cruise to Bella Coola.
6. R.C.N.V.R. training cruise to Drew Harbour.

1. *Pelagic Sealing Patrol to Queen Charlotte Islands.*—This cruise, which covered a period from May 2 to June 3, was carried out in company with H.M.C.S. *Armentieres* and H.M.C.S. *Thiepval* at the request of the Department of Marine and Fisheries to prevent infringements of the Pelagic Sealing Treaty of 1911.

The ship visited the following ports during the patrol:—

Winter Harbour, Port Alice, Queen Charlotte City, Captain's Cove, Prince Rupert, Sand Spit and Bamfield.

During the cruise a total of about 100 seals was sighted. A number of halibut fishing vessels were boarded and searched for seals, but nothing was found to indicate that the owners were violating the terms of the Pelagic Sealing Treaty.

Investigations into activities of a number of small boats were also carried out from H.M.C.S. *Patrician's* motor launch, but no violations of the treaty were found.

On this cruise it was ascertained that for the past few years the Indians of Queen Charlotte islands have done very little seal fishing as they did not find it sufficiently lucrative.

Full reports of sealing operations were supplied to the fisheries authorities.

Throughout the cruise the ship's company trained in general drill, navigation, seamanship, signals, wireless telegraphy, gunnery and torpedo.

The cruise provided excellent opportunities for training under seagoing conditions, and in view of the severe weather conditions encountered the seamanship training was specially valuable.

While in harbour the ship's company trained in boat pulling and disciplinary drill. Athletic competitions with local sports organizations were also held.

The ship was open to visitors at all ports visited and a large number at each place availed themselves of the opportunity afforded to visit the ship.

While at Prince Rupert the R.C.N.V.R. Headquarters was inspected and ratings of the Prince Rupert Half Company trained on board.

H.M.C.S. *Patrician* returned to Esquimalt, B.C., on June 3.

2. *Torpedo Training Cruise to Comox.*—This cruise extended from June 30 to July 9. En route to Comox, H.M.C.S. *Patrician* visited Vancouver and represented the Royal Canadian Navy at the Diamond Jubilee celebrations. The Jubilee parade was led by a field gun crew and a detachment from *Patrician.*

On July 3 the ship arrived at Comox and carried out a complete course of torpedo exercises. The results of these exercises were satisfactory and showed a steady improvement in the efficiency of the ship's company. *Patrician* returned to Esquimalt, B.C., on completion of the exercises on July 9.

3. *Cruise to Seattle July 9 to July 12.*—The cruise to Seattle was made in company with H.M.S. *Colombo,* a ship of the America and West Indies Squadron. While proceeding to Seattle joint tactical exercises were completed and H.M.C.S. *Patrician* acted as target ship for H.M.S. *Colombo's* throw off firing. Combined torpedo attacks were also carried out. H.M.C.S. *Patrician* parted company with H.M.S. *Colombo* on July 12 and returned to Esquimalt.

4. *Gunnery Training Cruise to Port Renfrew.*— The ship's summer gunnery training program was carried out at Port Renfrew from July 17 to July 20. During the first two days the working-up exercises were completed and the third day was taken up with both day and night full calibre firing. The results of firings were quite satisfactory.

5. *R.C.N.V.R. Training Cruise to Bella Coola.*—On August 23 H.M.C.S. *Patrician* with a class of R.C.N.V.R. officers and ratings on board sailed for Bella Coola. The following ports were visited during the cruise:—

Beaver Cove, Namu, Bella Coola, Ocean Falls, and Qualicum.

The R.C.N.V.R. officers trained throughout the cruise in navigation and pilotage, and the ratings followed a course in seamanship. The cruise was most valuable for the type of training carried out in view of the difficult nature of the passes navigated. The ship returned to Esquimalt on August 28.

6. *Training Cruise to Drew Harbour.*—From September 26 to October 8 H.M.C.S. *Patrician* in company with H.M.C.S. *Armentieres* cruised to Drew Harbour and also called at Deep Bay, Phillip's Arm, Duncan Bay and Tribune Bay. Classes of R.C.N.V.R. officers and ratings formed part of the complement of each ship.

Joint tactical and gunnery exercises were completed and the R.C.N.V.R. Officers trained in navigation and pilotage and R.C.N.V.R. ratings in seamanship and gunnery respectively. The ships' crews also completed combined General Drill and evolutions while in harbour.

The ships were open to visitors at all ports visited.

General.—On completion of the training program H.M.C.S. *Patrician* was placed in reserve. The general condition of the ship and the worn state of machinery and boilers rendered her unserviceable for further sea service. She will be replaced by H.M.C.S. *Vancouver* (ex H.M.S. *Toreador*) upon arrival of that ship at Esquimalt.

H.M.C.S. "Armentieres"

H.M.C.S. *Armentieres*, based at Esquimalt, in co-operation with H.M.C.S. *Thiepval*, is used for R.C.N.R. and R.C.N.V.R. training purposes of that port. In addition to the above, during the year this ship made the following cruises:—

1. Pelagic sealing patrol—west coast of Vancouver island to Queen Charlotte sound.
2. R.C.N.V.R. training cruise to Maple Bay.
3. R.C.N.V.R training cruise, west coast of Vancouver island to Queen Charlotte sound (Pelagic Sealing Patrol duties)
4. Gunnery cruise to Port Renfrew.
5. R.C.N.V.R. training cruise to Bella Coola.
6. and 7. Bamfield life-saving patrol.

1. *Pelagic Sealing Patrol to Queen Charlotte Sound.*—From April 19 to 28. This cruise was taken in conjunction with H.M.C.S. *Patrician* at the request of the Marine and Fisheries Department.

During this period H.M.C.S. *Armentieres* patrolled off the west coast of Vancouver island and in Queen Charlotte sound, calling at the following ports:—

Ucluelet Arm, Refuge Cove, Nootka, Thasis Narrows, Clayuquot Sound, Winter Harbour, Maple Creek, Port Alice and Bamfield. At all these ports search was made for illicit trafficking in pelts and other information dealing with this matter.

Training classes were maintained throughout the cruise.

2. *R.C.N.V.R. Training Cruise to Maple Bay.*— From June 2 to 6. En route to Maple Bay H.M.C.S. *Armentieres* called at Ladysmith. R.C.N.V.R. training classes were instructed in seamanship and gunnery.

3. *R.C.N.V.R. Training Cruise to Queen Charlotte Sound.*—From June 17 to 19. This cruise was on pelagic sealing patrol work as explained in Cruise No. 1. In addition R.C.N.V.R. training classes were embarked and received extensive training, both theoretical and practical, in seamanship and ship work.

The following ports were visited during the cruise:—

Refuge Cove, Hecate Channel, North Harbour, Verney Bay, Hardy Bay, Port Alexander, Shushartu Bay, Port Langford, Uchucklesit Harbour and Bamfield.

4. *Gunnery Cruise to Port Renfrew.*—From July 15 to 21. During this cruise H.M.C.S. *Armentieres* towed targets for H.M.C.S. *Patrician's* firings and

also carried out 12 pdr. practice. From July 22 to 26, *Armentieres* was employed co-operating with military authorities in connection with military coast defence exercises.

5. *R.C.N.V.R. Training Cruise to Drew Harbour.*—September 26 to October 8, in company with H.M.C.S. *Patrician*. The following ports were visited during this cruise:—

Deep Bay, Drew Harbour, Phillip's Arm, Duncan Bay and Tribune Bay.

R.C.N.V.R. training classes exercised in seamanship, signals and gunnery instruction. General drills and evolutions and also manoeuvres at sea were carried out with H.M.C.S. *Patrician*.

6 and 7. *Life Saving Patrol.*—During these cruises H.M.C.S. *Armentieres* was employed in the vicinity of Bamfield for the Department of Marine and Fisheries. The ship was on this duty from December 10 to 28, and February 14 to March 1.

A continuous patrol was maintained by the ship in the vicinity of Bamfield, but no ships in distress were sighted or reported. The weather conditions encountered were severe.

H.M.C.S. "Thiepval"

H.M.C.S. *Thiepval* based at Esquimalt, in co-operation with the H.M.C.S. *Armentieres* is used for R.C.N.V.R. and R.C.N.R. training purposes. In addition to this work the following cruises were carried out:—

1. Pelagic sealing patrol off west coast of Vancouver island and in Queen Charlotte sound.
2. Pelagic sealing patrol off west coast of Vancouver island.
3. R.C.N.V.R. training cruise to Comox.
4, 5 and 6. Bamfield life-saving patrol.
7. Training cruise to Vancouver and Ladysmith.

1. *Pelagic Sealing Patrol off West Coast of Vancouver Island and in Queen Charlotte Sound.*—From May 1 to 15. This cruise was taken in conjunction with H.M.C.S. *Patrician* at the request of the Department of Marine and Fisheries. Various ports along the coast were visited, including: Matilda creek, Refuge cove, Queen's cove, Winter harbour, Bull harbour, Hardy bay, Port Alice, Verney bay, and Bamfield.

General drills and evolutions were carried out at sea and in harbour.

2. *Pelagic Sealing Patrol off West Coast of Vancouver Island and in Queen Charlotte Sound.*—From May 22 to June 1. This cruise was for the same purpose as the previous cruise. The following ports were visited:—

Refuge cove, Nootka, Friendly cove, and Bamfield.

General drills and evolutions were carried out at sea and in harbour.

3. *R.C.N.V.R. Training Cruise to Comox.*—From July 3 to 9. During the cruise in company with H.M.C.S. *Patrician*, H.M.C.S. *Thiepval* acted as target ship for *Patrician's* torpedo practices and R.C.N.V.R. ratings trained in signals and torpedo.

Military Coast Defence Exercises.—From July 18 to 24, H.M.C.S. *Thiepval* co-operated with military authorities in connection with the Military Coast Defence Exercises.

4, 5 and 6. *Bamfield Life Saving Patrol.*—During these cruises H.M.C.S. *Thiepval* was employed in the vicinity of Bamfield for the Department of Marine and Fisheries. The ship was on this duty from November 30 to December 11; from December 28 to January 4; and from January 30 to February 15.

Severe weather was encountered during these patrols, but no calls for assistance were received and no ships reported in distress.

7. *Training Cruise to Vancouver and Ladysmith.*—March 19 to March 24 W/T experiments were carried out during the cruise.

General

The training carried out by all of H.M.C. ships during the year was of a high order. The officers and ratings showed improvement in their technical knowledge and the cruises were so planned that the general knowledge of each ship's company with regard to the navigation of approaches to harbours and, in the case of ships stationed on the west coast, the navigation of the difficult passes and straits were greatly extended.

At all ports visited, ships' companies were received most courteously and the co-operation and consideration extended by the civic authorities is highly appreciated.

2. R.C.N. BARRACKS

R.C.N. Barracks are maintained at Halifax, and Esquimalt as depots for H.M.C. ships based at those ports, and as training bases for R.C.N., R.C.N.R., and R.C.N.V.R. personnel.

Training of R.C.N. ratings in barracks is divided into the following classes:—

New Entries	Signalman
Boys	Wireless Telegraphy
Ordinary Seaman	Engine Room Ratings
Seaman Gunners and Seaman Torpedomen	

The new entries, boys, and ordinary seamen classes train in gunnery, torpedo, seamanship, mine-sweeping, signals, boat pulling and school.

Signal classes train in semaphore, morse, signal books, practical training, wireless telegraphy and school.

Wireless telegraphy classes train in buzzer, visual signalling, theory, practical training, signal books and school.

Engine room ratings train in boat pulling, squad-drill, school, and engine room duties.

R.C.N. Barracks, Halifax

During April no training classes were formed, as with the exception of the necessary instructors for the R.C.N.R. training during the winter and the minimum ratings required for the upkeep of the barracks, the remainder of barracks' company was on draft serving in H.M. ships of the American and West Indies squadron, and did not return to Halifax until May 1. During May these ratings were employed fitting out minesweepers and *Patriot* for the summer training season for R.C.N.V.R. personnel. In June all new entries were drafted to H.M.C.S. *Patriot* for sea service as all Instructors at barracks were occupied with R.C.N.V.R. training of officers and men.

At the end of July, at the request of R.C.A.F., a diving party from R.C.N. barracks was sent to locate and salve seaplane *Vaurnna Z U* which was sunk in Cross lake, Manitoba. This operation which involved transportation of three tons of diving gear and equipment up rivers in small boats through practically virgin wilderness was entirely successful and valuable aerial equipment was recovered.

In the autumn, on completion of R.C.N.V.R. training season, extensive training of the R.C.N. personnel was undertaken. In view of the satisfactory new equipment which has been installed in the gun battery and torpedo drill hall, and the installation of a mining school in the dockyard, it was considered

possible for the first time in the history of the R.C.N. to qualify seaman gunners and seaman torpedomen in Canada. Notwithstanding that certain practical parts of the syllabus in turret work and heavy calibre gun work had to be omitted, the results were highly satisfactory. Details of the numbers instructed are shown under "Personnel."

During the year great improvements have been made in the W/T equipment of barracks and a series of highly important W/T experiments have been carried out between barracks and H.M. ships and W/T stations.

Classes in academic subjects were conducted at barracks under qualified schoolmasters. This school training is of a nature which enables ratings to qualify at the educational tests required by the Regulations for advancement to higher ratings.

The personnel of the barracks had a successful year in athletics, especially in soccer, when the R.C.N. teams won every league they entered and the following trophies:—

Chronicle Cup (Championship of Nova Scotia), Garrison Cup, City League Cup and Milne Trophy.

Both Junior and Senior rifle teams were very successful, the junior team winning the trophy for the second time.

Great interest was also shown in boxing, baseball, and other games. The participation in sports is a very valuable part of the general training and is an important factor in the development of esprit de corps in the service.

The autumn training classes were completed just before Christmas.

On January 2 a draft of 90 officers and men were discharged to Portsmouth to assist in fitting out *Torbay* and *Toreador* for commissioning. This draft eventually commissioned *Torbay* (renamed *Champlain*) on March 1.

The main buildings, Gunnery School, Torpedo School and Mining School, situated in the dockyard, together with other buildings and equipment for the effective training of ratings, have all been well maintained during the year and requisite repairs and alterations have been carried out as necessary.

R.C.N. Barracks, Esquimalt, B.C.

The group of buildings forming the barracks establishment at this point is situated across the harbour from the dockyard and adjacent to the new *Sanghees Drydock*. The buildings, boathouses, jetty, and parade ground, and also lighting and water services are in a condition of good repair.

The roads in the barracks were rebuilt during the year, also a guard house and a new W/T mast were erected and other improvements carried out.

In April, R.C.N. barracks and ship's company were inspected by the Director of Naval Intelligence of Headquarters, Ottawa.

During April the personnel were employed fitting out H.M.C. ships for the summer R.C.N.V.R. training season.

In May all new entries and younger ratings were discharged for sea service in H.M.C. ships, as all instructors at R.C.N. barracks were required for R.C.N.V.R. training of officers and men.

During the autumn, when the R.C.N.V.R. training was completed, extensive training of the R.C.N. personnel was undertaken.

On January 1 a draft of twenty ratings was sent to attend gunnery and torpedo schools at Portsmouth for technical courses, prior to joining H.M.C.S. *Vancouver*.

On January 28, H.M.C.S. *Patrician's* ship's company was drafted to Portsmouth to commission H.M.C.S. *Vancouver*.

During the year great improvements have been made in the W/T equipment of barracks.

Classes in academic subjects were conducted at barracks under a qualified schoolmaster.

Great interest was taken in all athletic games and rifle shooting, and the results were satisfactory.

3. H.M.C. DOCKYARDS

H.M.C. Dockyard, Halifax, N.S.

The repair base at the dockyard has been in continuous operation throughout the year. Main activities have been in connection with maintaining in running efficiency all ships of the Naval Service, and the carrying out of repairs as required to vessels of the Department of National Revenue, Marine and Fisheries, Railways and Canals, also to ships of the militia services, Royal Navy, and vessels of the United States ice patrol.

In addition to ship work other requirements of Government departments have been dealt with within the capacity of the repair establishment.

The condition of all dockyard buildings, wharves, roads, machinery, boilers, cranes, equipment, electric, gas and water services, etc., have been well maintained throughout the year, and steps have been taken to provide additional facilities for the proper and effective training of personnel at this establishment.

The Armament Supply Depot at the dockyard has continued to function in an efficient manner and the overhaul of torpedoes has been undertaken as required. During the year the magazines at Fort Clarence have been evacuated, all ammunition, explosives, etc., having been transferred to the new magazines at Bedford Basin. The magazines at Georges Island have given satisfactory service, the fire protection arrangements being in every way efficient.

The small dockyard technical staff is considered to be capable and efficient. During the year labour has been, for the most part, scarce, but sufficient has been procurable to meet requirements.

H.M.C. Dockyard, Esquimalt, B.C.

All demands upon the repair base of the above dockyard have been met during the year. Overhauls, refits and repairs have been undertaken to H.M.C. ships *Patrician, Thiepval,* and *Armentieres,* and the auxiliary vessels at the dockyard have been well maintained.

Work has been undertaken for the Departments of Marine and Fisheries, Public Works and Health during the year.

The general condition of dockyard roads, buildings, wharves, etc., is good and all machinery, including machine tools, plant, equipment and appliances, has been kept up to date and in good order.

In the course of the year the new boat shop and torpedo depot building was completed and put into operation, thereby enabling the repair base to return to its full capacity for operation. The electrical services were also re-organized and made efficient.

There has been an increased demand for labour at this point during busy seasons, but notwithstanding this no delay has been occasioned for want of men. The small technical staff is considered to be efficient.

4. NAVAL INTELLIGENCE

The Canadian Naval Intelligence Service has operated in a satisfactory manner as a unit of the world-wide Intelligence organization maintained by the Admiralty.

Close co-operation has been maintained with the Intelligence Service of the Militia and Air Force and also with other Intelligence areas. The other Government departments have furnished the service with much valuable information for inclusion in various reports.

Reports on Hudson bay and routine reports on naval intelligence, shipping, trade routes, etc., in the Ottawa area have been forwarded to the Admiralty for reference and necessary distribution.

5. PERSONNEL OF THE CANADIAN NAVAL FORCES

The personnel of the Canadian Naval Forces is as follows:—

	Officers	Men
(1) Royal Canadian Navy	74	451
(2) Royal Canadian Naval Reserve	70	430
(3) Royal Canadian Naval Volunteer Reserve	70	930

(1) Royal Canadian Navy

The personnel of the Royal Canadian Navy is allocated throughout the service as follows:—

Ship or Establishment	Officers	Men
Headquarters	10	1
H.M.C.S. *Stadacona* (Halifax Depot)	13	104
H.M.C.S. *Patriot* (East Coast)	5	80
H.M.C.S. *Champlain* (East Coast)	..	..
H.M.C.S. *Festubert* (East Coast)	1	18
H.M.C.S. *Ypres* (East Coast)	1	18
H.M.C.S. *Naden* (Esquimalt Depot)	13	104
H.M.C.S. *Patrician* (West Coast)	5	80
H.M.C.S. *Vancouver* (West Coast)	..	..
H.M.C.S. *Armentieres* (West Coast)	1	18
H.M.C.S. *Thiepval* (West Coast)	1	18
Serving in the Royal Navy	24	10
	74	451

The department's policy is to fill all vacancies in the Naval Service by recruiting young Canadians. Youths between 16½ and 17½ years of age sign an engagement form for seven years' continuous and general service from the age of 18. This policy has been further implemented during the present year by the discharge of 9 ex R.N. ratings who were serving in the Royal Canadian Navy under special service engagements. The vacancies caused by their discharge were filled by the advancement of qualified Canadian ratings. Sixty-four Canadians entered the service during the year, and filled vacancies caused by the discharge of Special Service ratings and Continuous Service ratings whose engagements terminated.

The Admiralty have placed at the disposal of the department training facilities of ships and establishments of the Royal Navy where Canadian ratings attend and qualify in non-substantive courses. The cost of this training is borne by the department.

During the past year the following ratings attended courses for the non-substantive ratings shown at R.N. Establishments:—

Seaman Torpedoman	9
Leading Torpedoman	5
Torpedo Gunner's Mate	3
Torpedo Coxswain	1
Gunlayer II	5
Gunner's Mate	1
Gunner's Mate (Re-qualifying)	1
P and R.T. Instructor	1
Diver II	2
Morale Course	4
Ordnance (qualifying)	1
Ordnance (re-qualifying)	1
Chief Electrical Artificer (re-qualifying)	1
P.O. Telegraphist (re-qualifying)	1
Signals	4
Mechanical Training Course	12
Gunner (T), (qualifying)	1

In addition to the above the following qualified at R.C.N. Barracks, Halifax:—

Seaman Torpedoman	9
Seaman Gunner	8

Twenty-eight ratings passed the Educational Test for advancement to Petty Officer and six ratings passed the Higher Educational Test for promotion to Warrant Rank.

Twenty-four officers of the R.C.N. have trained in ships and establishments of the R.N. during the year. One officer attended the Imperial Defence College, one attended the Royal Navy Staff Course, one officer qualified in navigation, two Navigating officers qualified for 1st Class ships, and three officers are undergoing courses to qualify for rank of Lieutenant. The remaining officers served in H.M. ships.

In December, 1927, the complement of H.M.C.S. *Patriot* and H.M.C.S. *Patrician* proceeded to England to man H.M.C.S. *Champlain* and H.M.C.S. *Vancouver*, commissioned at Portsmouth. While awaiting completion of refits of these vessels, the Canadian ratings eligible for gunnery and torpedo courses qualified in these subjects at R.N. establishments.

Upon the visit of H.M. ships of the America and West Indies Station to Canadian naval bases, the facilities available in these ships for training and examination of engine room ratings in auxiliary machinery were used, through the courtesy of the Commander in Chief, to enable R.C.N. ratings to qualify in that subject.

(2) Royal Canadian Naval Volunteer Reserve

The following table gives a list of R.C.N.V.R. companies and half companies, the number of officers and men of the strength of each and the number of officers and men who performed naval training and voluntary service.

The training carried out in ships of the Royal Navy is shown separately. Officers and men embarked in H.M.S. *Capetown*, *Colombo*, *Cairo*, *Heliotrope* and *Wistaria*, ships of the America and West Indies squadron, while these ships were cruising in Canadian waters. The reports from Commanding Officers of H.M. ships show that the R.C.N.V.R. ratings were successful in their training and that they evinced keenness to learn. Their conduct throughout the cruise was very good and they took their place among the more experienced Imperial ratings in an exemplary manner.

Headquarters at	Recruited Strength on 31st March 1928		Annual Training		Voluntary Service		Training with R.N. Ships
	Officers	Men	Officers	Men	Officers	Men	Ratings
Halifax Half Company	3	27	.....	10	.....	7	.....
Charlottetown Half Company	2	46	1	10	.....	3	4
St. John Half Company	4	46	1	33	.....	16	4
Quebec Half Company	4	35	2	17	2	11	4
Montreal Company	5	95	5	71	1	17	1
Ottawa Half Company	5	48	4	20	1	3	8
Toronto Company	8	45	1	48	1	25	.....
Hamilton Half Company	5	48	1	35	.....	13	2
Winnipeg Company	9	78	7	74	2	36	10
Regina Half Company	5	46	3	33	1	19	2
Saskatoon Half Company	4	45	3	31	2	19	2
Edmonton Half Company	3	46	3	34	1	7	2
Calgary Half Company	4	53	3	31	2	11	3
Vancouver Half Company	4	42	3	29	.....	16	3
Prince Rupert Half Company	3	40	3	20	.....	9	.....
	68	740	40	496	13	212	45

The recruited strength shows an increase over the previous year of 11 officers and a reduction in the total number of ratings of 81. This reduction is due to the completion of three-year term of enlistment of ratings who did not re-engage. The complement will be refilled as soon as the summer training season begins.

The activities at each headquarters have been further developed during the year and training equipment has been improved and increased. Attendance at Company Headquarters drills has been excellent and at practically all headquarters social clubs have been organized, which have created a healthy *esprit de corps*. Any expenses incurred through social activities are paid from private sources and not from Government funds.

The R.C.N.V.R. at each Headquarters have supplied Naval Guards of Honour at public functions and have carried out with the military units combined church parades, route marches and other joint exercises. The organization is now well established and is most favourably commented upon by the press.

The Imperial Order of Daughters of the Empire have donated two cups for competition in signals in the R.C.N.V.R. One of these cups is competed for by R.C.N.V.R. ratings training at Esquimalt, B.C., and the other by ratings training at Halifax, N.S.

Each company or half company trains not less than two nor more than four ratings to participate in the competition. Upon arrival at Naval Training Headquarters the ratings are examined on a competitive basis in signalling and are awarded points. The company or half company winning the greatest number of points is awarded the trophy. The trophies were won by the Quebec half company and by the Winnipeg company for the past year.

(3) Royal Canadian Naval Reserve

During the year recruiting for the Royal Canadian Naval Reserve was re-opened to a limited extent, and one officer and fifty-one ratings were added to the force. The recruited strength at the end of the year was 34 officers and 141 ratings.

The R.C.N.R. training season extended from October 1 to March 31.

The following table shows the localities where R.C.N.R. registrars are located, the total number of officers and ratings on the rolls of each registrar, and the total number of officers and ratings from each locality who carried out naval training and voluntary service.

Locality	Recruited Strength		Naval Training		Voluntary Service	
	Officers	Ratings	Officers	Ratings	Officers	Ratings
Halifax	14	27	5	27	.....	8
Lunenburg*	.....	.....	.....	.....	.....	.....
Charlottetown	1	24	.....	17	.....	2
St. John	1	8	.....	5	.....	1
Quebec	7	36	4	32	.....	7
Montreal	2	26	.....	24	.....	11
Prince Rupert†	.....	.....	.....	.....	.....	.....
Vancouver	5	8	1	5	.....	.....
Victoria	4	12	.....	8	.....	.....
	34	141	10	113	.....	29

†Prince Rupert was cancelled and records and personnel transferred to Victoria Division in March, 1928.

*Lunenburg was cancelled as an R.C.N.R. centre and records and personnel transferred to Halifax Division in March, 1928.

Royal Fleet Reserve

The arrangements made with the British Admiralty for training Royal Fleet Reserve ratings resident in Canada have been continued during the past year. All costs in connection with this training are paid by the British Admiralty.

At the end of the fiscal year there were 91 Royal Fleet Reservists enrolled in the Canadian section of the R.F.R. Of this number 26 were Class "A" and 65 were Class "B."

Class "A" Reservists are those drawing a pension from the Admiralty and qualifying for reserve pension and they carry out reserve drill every other year.

Class "B" ratings are those who are completing time for R.F.R. gratuity and they are required to drill for a period of seven days each year.

The following R.F.R. ratings trained during the year:—

At Halifax—

Class "A"— 5 ratings.
Class "B"—17 ratings.

At Esquimalt—

Class "A"— 2 ratings.
Class "B"—11 ratings.

6. NAVAL STORES

The work of supplying naval, victualling and armament stores to H.M.C. ships and establishments and to auxiliary services was carried out during the year with complete success. The greatest economy possible was practised in connection with the handling of supplies and the employment of personnel.

In addition to meeting the requirements of the Naval Service, stores were supplied to other Government departments on a repayment basis to a considerably greater extent than has been the case in the last few days. Supplies have also been made for or on behalf of the British Admiralty.

The condition of the stocks and storekeeping facilities generally at the store depots reflects credit on the store officers concerned. At Halifax, however, the storehouses are not the most satisfactory, inasmuch as they are of various designs, in many instances being of very old construction. They are not conveniently located, being scattered from one end of the dockyard to the other. Owing to the absence of a satisfactory method of heating, the proper care of the stores is always a difficult task. The erection of a modern, steam-heated storehouse at Halifax would solve all these difficulties. The same condition does not apply at Esquimalt to the same extent. The personnel, which is well trained, carried out their duties in a satisfactory manner.

An inspection of the store depots at Halifax was made in May by the Director of Naval Stores, where the supply work was found to be in a state of efficiency. Inspections were also made during the year of the eastern R.C.N.V.R. company stores. The stocks held by these companies were verified and any discrepancies discovered adjusted. Clothing stores were examined and, where necessary, surveyed, condemned or returned to H.M.C. Dockyard. Disposal of unserviceable garments was made to the Department of Indian Affairs through the Government Salvage Officer.

During the year H.M.C.S. *Aurora* and submarines C.H. 14 and 15 were sold through the Government salvage officer for breaking up purposes. Prior to their sale all stores and fittings which could be utilized in the service for training or instructional purposes were removed.

As the work of this branch has to do with the supply of two distinct classes of stores, which, owing to their nature, require separate treatment, the branch is divided into two divisions, viz., naval and victualling stores, comprising also the

supply depots at the dockyards, and Naval Armament Supply, likewise comprising the Naval Armament Supply depots at Halifax and Esquimalt. The detailed work of these divisions is, therefore, reviewed separately.

Naval and Victualling Stores

This division is responsible for the provision, issue and accounting for all naval and victualling stores, including the uniforms for the R.C.N.V.R. and R.C.N.R., and the victualling of naval personnel.

Stocks of all necessary stores are maintained under experienced Naval Store officers at H.M.C. Dockyards, Halifax and Esquimalt. In addition to supplies to meet ordinary requirements, reserves of certain items are maintained to ensure issue without delay and also to provide for emergencies.

The stocks of naval and victualling stores on hand at the close of the year amounted to $708,937.36 at Halifax and $371,151.22 at Esquimalt.

The direct supply of stores, particularly of fresh provisions and fuel, is also arranged for vessels of the Canadian Naval Service and for all other naval establishments, including R.C.N.V.R. Company Headquarters, as well as for visiting vessels of Imperial Service, and when required for vessels of other Government departments either by local purchase or by standing contracts. These contracts are made by the Director of Contracts for supply at different points of fuel, provisions, ice, laundrying, cartage, etc., to meet estimated or probable requirements. In addition to the direct supply from these contracts to visiting Imperial ships, supplies were made to H.M. Dockyard, Bermuda, particularly of lumber and gases.

The issues to Canadian naval ships and establishments are governed by the authorized allowance, in case of naval stores, which not only control the quantities but the patterns of the stores used. In addition, naval stores for authorized refits, repairs, new construction, etc., are issued. Clothing is issued in accordance with the uniform regulations, and provisions are drawn under a general messing system which operates on a standard scale of rations.

The total volume of issues from both dockyards of all naval and victualling stores for 1927-28 was as follows:—

HALIFAX DOCKYARD

(Not including naval armament stores)

Value of stores received	$ 114,791 65
Value of stores returned	8,532 40
Value of stores issued	171,709 04

ESQUIMALT DOCKYARD

(Not including Naval Armament Stores)

Value of stores received	$ 74,898 19
Value of stores returned	13,338 00
Value of stores issued	113,164 09

Disposal of obsolete and unserviceable stores from both dockyards was continued throughout the year by the Government Salvage Officer; the value of stores disposed of in this manner amounted to $9,059.05. Inasmuch as all stores which can be used by other Government departments are transferred instead of being sold, this method of disposing of these stores is economical, and satisfactory from the point of view of this department.

The fuel oil tank which was leased from the Imperial Oil Limited at Esquimalt, B.C., was given up, as the balance of the serviceable stock of naval fuel oil had been drawn from this tank. Trials had been made previously of the commercial fuel oils available on the west coast, and as a result of these

trials it was found that arrangements could be made for the supply of satisfactory fuel oil from commercial sources. This will mean an appreciable saving to the department in the matter of rental charges.

The biennial program of stocktaking at both dockyards was completed during the year with very satisfactory results. Under this program stock was taken of every section of the stores, and in the case of perishable stores and stores which are used up frequently, such as provisions, stock was taken twice in the course of two years. The discrepancies found were very few and none were of a serious nature, and the results of the stocktaking as a whole indicate that the storekeeping at both dockyards is in a very high state of efficiency.

The store accounts at the dockyards, as examined at the close of the fiscal year under the system of concurrent audit, have been found to have been kept very accurately, any discrepancies discovered being of a minor nature and readily adjusted. In addition to the store accounts of the dockyard stocks, the store accounts from H.M.C. ships and establishments which were rendered in accordance with the regulations, have been examined and found to be satisfactory; the stores supplied being properly accounted for with no serious deficiencies. The clothing accounts maintained by each R.C.N.V.R. company were sent into office during the year and were examined with very fair results. Where necessary, new accounts have been prepared and returned to the different companies with the necessary instructions. A review was also made of a number of inventories of the stores kept at each R.C.N.V.R. Company Headquarters, with satisfactory results.

In connection with the victualling of the personnel of H.M.C. ships and establishments, under the general messing system, the provision accounts of each ship and establishment concerned were carefully scrutinized at Headquarters, with a view to ensuring that (1) all supplies were used to good advantage and (2) that a satisfactory menu was provided.

The system of general messing proved very satisfactory and 387,828 meals were served at an average cost of 15 cents a meal.

The issue of special clothing for the reserve officers from Naval Service Headquarters was continued, and the volume of material supplied in this connection is an indication of the necessity and popularity of this service.

In connection with the provision of stores at the dockyards, transfers were made of quantities of stores between both dockyards; shipment by water freight being arranged wherever possible in view of the economy to be effected.

Special reserves, such as minesweeping stores, examination service stores, port war signal stations reserve, submarine mine net defence reserves, etc., were maintained in a state of efficiency.

During the year a number of transactions in connection with naval reserve properties were handled by this branch, including the leasing of these lands to private individuals, where such action was in accordance with public interests, and the transfer of other properties as necessary to the Department of Interior for administration.

Naval Armament Supply

This division is responsible for the supervision and control of all matters pertaining to the provision, receipt, issue, care and maintenance, repair, testing, examination, accounting and audit of all naval armament stores, comprising ordnance, ordnance stores, ammunition, torpedoes, torpedo stores, paravanes, mines and depth charges, in connection with the Canadian Naval Service and Imperial Service at Halifax and Esquimalt.

Naval Armament Supply Depots maintained at Halifax and Esquimalt comprise storehouses where the necessary facilities for the care, issue and receipt of guns, gun mountings, and torpedoes are available; magazines for

the proper stowage, care and maintenance of the respective classes of explosives; and workshops for carrying out the necessary repairs and alterations to ordnance and ordnance stores authorized by the list of changes in war materials.

The magazines at Halifax are situated at Bedford Basin and Georges Island; the old magazine at Fort Clarence was vacated in June, 1927, when the property was sold to the Imperial Oil Limited, and the explosives removed to the new magazines at Bedford Basin.

The Bedford Basin Joint Service Magazines, now in course of construction, will eventually accommodate all explosives at Halifax, for the Naval, Military and Air services. Up to the present the construction of buildings has been confined to naval requirements as it is most important that Georges Island should be vacated at the earliest possible date.

The principal feature of the year's progress was the removal of the approximately 300 tons of ammunition from the old Fort Clarence magazine to Bedford magazines. This work was carried out within a week, which, considering the difficulties of the operation owing to the lack of facilities for transport, reflects great credit on the Naval Armament Supply Officer and his staff. The new construction completed this year comprises magazines for groups I, II, III, IV and VI, a laboratory area consisting of examination rooms for groups III and VI, and V and VII, and shell scraping room, office and empty store, boiler house, heating conduits, men's dining room, and additional railways. The program for the completion of this magazine will be continued during the fiscal year 1928-29.

The completed buildings have proved very satisfactory and are now ready for occupation; the evacuation of Georges Island will, therefore, be carried out this summer, which will complete the concentration of all naval explosives with the exception of a few small groups for which buildings are not yet available.

During the year 1927-28 the organization has been improved by the evolution of a trained inspection staff for the carrying out of all proofs, tests, etc., of ammunition and inspection of naval ordnance.

The extent and importance to the service of the establishment and the responsibility which it involves can be realized from the fact that it will, when completed, comprise fifteen buildings, 11 of which are magazines, situated in an area larger than that of the Naval Dockyard.

The facilities of transportation from the dockyard to Bedford leave much to be desired, as the only boat available is the M.L.5, which is unable to cope with ice conditions during the winter and is not powerful enough to tow an ammunition lighter. Moreover, this boat has to carry out all dockyard work. These difficulties have to a certain extent been overcome through the co-operation of the military transport services who undertake to make certain trips to Bedford when ice or weather conditions render it inadvisable to use M.L. 5. The matter of providing a suitable vessel for use at the new magazines is therefore one of considerable importance.

Two married quarters have been provided for the storehousemen who have taken up their residence there. This is a distinct advantage, as in addition to being on the premises at all times, these men assist the night watchman in guarding the area both day and night, a form of nucleus brigade.

The guarding of the magazines will eventually be undertaken by a detachment of the R.C.M. Police as soon as the necessary accommodation is available. These quarters have been included in the 1928-29 building program.

The naval cordite and miscellaneous explosives are at the present moment still stowed at the Georges Island magazine, where the inspections and laboratory operations in connection therewith have to be carried out in extemporized

places. As the evacuation of this magazine is now about to take place, all such work will be carried out at Bedford in the modern buildings provided. The services of the resident storehouseman at Georges Island, who is now employed part time, will be dispensed with.

An ammunition lighter of 60 tons capacity is being built by contract for service at the Bedford magazines and will be available for use in July, 1928.

The magazines at Halifax are inspected by a representative of the Commander in Chief, American and West Indies Squadron, whenever opportunity offers. The reports of these inspections reflect the greatest credit on the Naval Armament Supply Officer and his staff.

The Torpedo Workshops at Halifax, and Esquimalt, have been included as a part of the Armament Supply Depots. The work of repairs, overhauls, tests, etc., is carried out under the joint supervision of the Consulting Engineers and the Naval Armament Supply Officers.

The Director of Naval Stores continued to be represented on the Standing Board of Officers, Joint Service Magazines, Halifax, N.S., by Lieutenant E. Haines, M.B.E., R.N. (Ret'd). The work of this committee has been most satisfactory from the point of view of the Naval Stores Branch.

The stocks of naval armament stores at Halifax and Esquimalt are maintained in an efficient manner and have been depleted of all obsolete and unserviceable stores. Stock provision for the requirements of the Canadian Naval Service is made under an agreement with the British Admiralty to maintain sufficient reserve of ammunition and issue to H.M.C. ships on repayment as required. Under this agreement the storekeeping of all Imperial stocks, whether for ultimate issue to Imperial or Canadian services, is undertaken by the department in return for the provision of the necessary reserves by the Admiralty.

The store accounts of both depots, as well as of H.M.C. ships and establishments, have been kept and rendered in a satisfactory manner, as shown by the audit thereof.

The following represents the value of the receipts and issues made on behalf of the Canadian Naval Services during the year, exclusive of all transactions from Imperial stock:—

NAVAL ARMAMENT SUPPLY DEPOT, HALIFAX

Receipts	$ 54,102 00
Returns	65,318 00
Issues	74,242 00

NAVAL ARMAMENT SUPPLY DEPOT, ESQUIMALT

Receipts	$ 22,643 00
Returns	47,465 00
Issues	29,142 00

During the year the various R.C.N.V.R. units have been supplied with new web equipment to replace the obsolete leather equipment first issued.

Four 12-pdr., 8 cwt. field guns have also been provided, and are disposed at Edmonton, Winnipeg, Toronto, and Ottawa; the mid-western units using either the Edmonton or Winnipeg gun, whichever is nearer, and the mid-eastern units the Toronto or Ottawa gun. The coast units use the guns at Halifax, or Esquimalt.

The purchase of 1,200 rifles and bayonets through the High Commissioner at a cost of 30-/Od. per rifle and 10-/Od. per bayonet was effected. As the vocabulary price of these rifles and bayonets is £6.18.0 and £1 respectively, this purchase resulted in a saving of approximately $34,000. The 700 rifles loaned by the militia service have been returned.

A system of continuous stocktaking is carried on in such a way as to ensure that the complete stocks of naval armament stores, both Imperial and Canadian, are verified every year. Certificates of comparison of stock lists with ledger balances are rendered periodically.

All discrepancies, other than those of a trivial nature, i.e., wrong nomenclature or obvious clerical error, are thoroughly investigated, and the necessary adjustments made. The results of these stocktakings have been very satisfactory.

Purchases

As in past years, assistance has been afforded the Contracts Branch whenever possible in connection with the purchase of stores required for the Naval Service. Decisions have been given on technical questions entering into such purchases.

At the dockyards local purchase was made of such stores as are required in an emergency or which are of such a nature as to be best obtained locally. In all instances competitive tenders were invited and the purchases effected to the best advantage of the service. Copies of all such orders were forwarded daily to the Headquarters' office of the branch and if in order were passed to the Contracts Branch for final action towards payment. The value of all purchases made at the dockyards during the year amounted to $41,348.58 at Halifax and $36,908.19 at Esquimalt.

Local purchases were similarly effected by H.M.C. ships and establishments, comprising for the greater part fresh and miscellaneous provisions not issued by the dockyards, and on the basis of standing contracts arranged by the department from Headquarters. The procedure for dealing with these orders is similar to that followed for dockyard purchases.

During the year the total value of naval, victualling and armament stores purchased on account of the Naval Service, by local purchase and otherwise, for delivery to the store depots and to the service direct, amounted to $315,404.

7. FINANCIAL STATEMENT

The attached statements show a total expenditure of $1,727,305.85. There was a revenue during the year of $27,094.65, derived from refunds, rentals, discharges by purchase, sale of stores, coaling bridge and gun cases ex *Aurora*.

STATEMENT OF APPROPRIATION ACCOUNTS FOR THE FISCAL YEAR 1927-28

—	Appropriation	Expenditure	Balance unexpended
	$ cts.	$ cts.	$ cts.
Naval Service	1,725,000 00	1,702,225 09	22,774 91
To replace buildings and equipment destroyed by fire at Esquimalt, B.C. (part of Vote 141, transferred by Public Works Department)	18,000 00	17,970 06	29 94
Repairs to buildings and wharves, Halifax, N.S. (part of Vote 469, transferred by Public Works Department)	5,000 00	5,000 00	.....
Adjustment of war claims	5,000 00	2,110 70	2,889 30
	1,753,000 00	1,727,305 85	25,694 15
Imperial Government (Special Account)—			
Disbursements	97,323 26		
Carried from 1926-27	11,315 30	108,638 56	
Less—Reimbursements and credits	99,601 40		
Transferred to 1928-29	9,037 16	108,638 56	

STATEMENT OF REVENUE FOR FISCAL YEAR ENDED MARCH 31ST, 1928

CASUAL REVENUE:—			
Refunds to previous years expenditure		$ 151 87	
Rents:—Dockyard residences	$625 00		
Naval Reserve plots	143 80		
		768 80	
Sale of surplus and condemned stores		7,620 20	
Discharges by purchase		989 53	
Sale of coaling bridge		600 00	
Rent of stores and equipment		208 62	
Rental of derrick scow		1,110 00	
Sale of gun cases ex. *Aurora*		15,545 01	
Miscellaneous		100 00	
			$ 27,094 03
Premium, discount and exchange			0 62
			$ 27,094 65

SUSPENSE ACCOUNTS, SHOWING VALUE OF WORK DONE AND MATERIAL SUPPLIED FOR ACCOUNT OF CANADIAN GOVERNMENT DEPARTMENTS, BRITISH ADMIRALTY AND OTHERS

—	Debit	Credit	Balance transferred to 1928-29
	$ cts.	$ cts.	$ cts.
British Admiralty	102,254 01	99,237 65	3,016 36
British Ministry of Shipping	6,020 80	.....	6,020 80
British Air Ministry	363 75	363 75	.....
Department of Marine and Fisheries	12,859 08	11,719 23	1,139 85
Health Department	11,395 49	10,738 33	657 16
Public Works Department	4,782 34	4,703 06	79 28
Department of National Revenue	38,153 38	32,878 15	5,275 23
Department of Railways and Canals	25,952 98	25,952 98	.....
Royal Canadian Mounted Police Department	840 14	677 85	162 29
Department of Interior	13 46	9 96	3 50
Department National Defence (Militia and Air Services)	12,539 53	12,531 19	8 34
Government of Newfoundland	295 15	200 83	94 32
United States Government	33 75	35 55	Cr. 1 80
Miscellaneous	80,185 85	79,395 95	790 90
	295,690 71	278,444 48	17,246 23

STATEMENT OF EXPENDITURE UNDER THE NAVAL APPROPRIATION FOR THE FISCAL YEAR ENDED MARCH 31, 1928

Ship or Establishment	Pay and allowances	Stores and allowances	Medical services	a. Martial law b. Training recruiting boys	Repairs and maintenance new buildings	Miscellaneous effective services	Non-effective pay	Advances suspense and miscellaneous	Total	Grand total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
H.M.C.S. *Patriot* (c)	63,249 96	Cr. 47,471 68 16,317 76	859 74	a. 52 94	11,164 28	2,452 14	2,887 05	.....	49,459 25	
H.M.C.S. *Patriot* Fuel	.....	9,950 28	.....	.....	.....	.....	.....	.....	9,950 28	59,462 47
H.M.C.S. *Patrician* (d)	61,734 26	Cr. 41,995 18 19,234 12	2,383 33	.....	7,517 06	1,192 62	1,745 22	.....	51,811 43	
H.M.C.S. *Patrician* Fuel	.....	19,980 15	.....	.....	.....	.....	.....	.....	19,980 15	71,791 58
H.M.C.S. *Champlain* (e)	11,224 42	11,469 65	.....	.....	37,535 98	215 00	68 14	.....	60,513 19	
H.M.C.S. *Champlain* Fuel	.....	8,164 89	.....	.....	.....	.....	.....	.....	8,164 89	68,678 08
H.M.C.S. *Vancouver* (f)	13,069 55	12,139 37	64 00	.....	49,207 03	13,858 41	63 27	.....	88,401 63	
H.M.C.S. *Vancouver* Fuel	.....	4,105 99	.....	.....	.....	.....	.....	.....	4,105 99	92,507 62
Minesweeper *Festubert*	22,856 29	10,164 35	185 00	.....	3,712 95	178 01	811 77	.....	37,908 37	
" *Festubert* Fuel	.....	2,409 00	.....	.....	.....	.....	.....	.....	2,409 00	40,317 37
" *Ypres*	19,169 09	9,100 26	240 50	.....	6,652 99	193 33	344 38	.....	35,700 55	
" *Ypres* Fuel	.....	2,062 50	.....	.....	.....	.....	.....	.....	2,062 50	37,763 05
" *Armentieres*	25,246 70	8,692 79	516 84	.....	8,836 21	660 49	1,035 31	.....	44,988 34	
" *Armentieres* Fuel	.....	4,482 88	.....	.....	.....	.....	.....	.....	4,482 88	49,471 22
" *Thiepval*	23,478 30	8,788 35	350 64	.....	8,829 14	402 50	273 20	.....	42,122 13	
" *Thiepval* Fuel	.....	4,355 36	.....	.....	.....	.....	.....	.....	4,355 36	46,477 49
Headquarters	30,734 85	859 95	665 37	.....	.....	15,389 83	1,793 47	.....	.....	49,443 47
Canadian Officers and Men Overseas	86,813 20	23,208 73	575 09	.....	.....	41,571 16	.....	.....	.....	152,168 18
Barracks—										
Halifax, N.S.	143,933 90	80,472 12	3,456 29	a. 24 81	42,366 02	14,388 88	12,247 93	.....	.....	296,889 95
Esquimalt, B.C.	131,734 69	79,389 21	3,083 54	b. 22 80	19,359 45	14,045 22	3,134 42	.....	.....	250,769 33
Intelligence—										
Headquarters	9,386 05	58 76	39 00	.....	.....	2,886 71	770 94	.....	13,141 46	
Halifax, N.S.	4,557 50	143 42	50 00	.....	87 55	409 99	.....	.....	5,248 46	
Esquimalt, B.C.	5,679 90	123 84	.....	.....	.....	680 66	.....	.....	6,484 40	24,874 32

STATEMENT OF EXPENDITURE UNDER THE NAVAL APPROPRIATION FOR THE FISCAL YEAR ENDED MARCH 31, 1928—*Concluded*

Ship or Establishment	Pay and allowances	Stores and allowances	Medical services	a. Martial law b. Training recruiting boys	Repairs and maintenance new buildings	Miscellaneous effective services	Non-effective pay	Advances suspense and miscellaneous	Total	Grand total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
General account	1,386 00	1,598 21		b. 29 00	323 05	8,633 74	521 65	1,784 62		14,276 27
Govt. dept. transfers		915 17								915 17
R.C.N. Volunteer Reserve:—										
Charlottetown	2,558 85	1,700 30	10 00	b. 5 00	120 00	1,040 96			5,435 11	
Halifax	2,171 45	Cr. 4,025 69	1 00		120 63	857 86			Cr. 874 75	
St. John	4,505 33	1,242 03	34 00	b. 68 00	138 76	1,579 25			7,567 37	
Quebec	2,674 41	2,394 34	18 00	b. 46 88	587 29	1,436 89			7,157 81	
Montreal	6,724 05	10,982 35	59 70	b. 12 48	381 80	4,639 87			22,800 25	
Ottawa	3,352 38	1,703 09	17 00		148 00	2,095 23	577 60		7,893 30	
Toronto	4,948 25	13,062 64	52 98		188 50	3,630 07			21,882 44	
Hamilton	3,973 65	1,942 71	25 00	b. 53 00	130 40	2,430 20			8,554 96	
Winnipeg	9,491 35	10,838 36	24 33	b. 69 50	307 66	8,464 08	653 60		29,848 88	
Regina	4,196 35	8,520 04	6 00		203 44	3,238 98	653 60		16,818 41	
Saskatoon	4,478 35	2,324 99	13 25		48 00	3,532 36			10,396 95	
Edmonton	3,416 60	2,404 43	5 00	b. 60 50	248 15	2,686 26			8,820 94	
Calgary	3,487 75	1,808 22			305 24	2,120 59			7,721 80	
Vancouver	3,637 95	1,646 10		b. 62 50	296 67	1,005 46			6,648 68	
Prince Rupert	3,073 80	1,442 59		b. 15 00	354 13	2,102 53			6,988 05	
General account	609 60	931 63				266 87			1,808 10	
										169,468 30
R.C.N. Reserve:—										
Halifax	3,608 45	5,333 37	18 00	b. 2 33	42 32	243 24	2,247 00		11,494 71	
Lunenburg	27 75	148 08				2 21	148 00		326 04	
Charlottetown	1,703 90	807 19	98 00			76 98	244 00		2,930 07	
St. John	613 10	211 34	12 00			69 18	96 00		1,001 62	
Quebec	2,442 30	820 66	22 00	b. 71 61	49 59	1,193 39	1,927 00		6,526 55	
Montreal	1,157 10	461 60	2 00	b. 0 58		501 10	1,073 00		3,195 38	
Prince Rupert	431 85	99 28		b. 5 00		114 19	288 00		938 32	
Vancouver	605 70	187 06				15 25	679 00		1,487 01	
Victoria	623 20	56 82					469 00		1,149 02	
General account						137 13			137 13	29,185 85
Halifax, N.S.—										
Dockyard						1,593 84				1,593 84
Stores		Cr. 30,233 77								Cr. 30,233 77
Supply Base:—										
Dr. Operating expenses		41,614 27			13,407 99	5,066 36			60,088 62	
Cr. Percentages		Cr. 10,919 15				Cr. 61 58			Cr10,980 73	49,107 89

Repair Base:—										
Dr. Operating Expenses		1,218 43			26,281 95	9,199 37			36,699 75	
Cr. Percentages					Cr31,457 47				Cr31,457 47	5,242 28
New machinery					1,457 53					1,457 53
Fleet, general		356 00			6,092 56	5,479 38				11,927 94
Arm. Supply Depot:—										
Stores		37,544 95								37,544 95
Dr. Operating expenses	577 13	50,768 48			14,313 89	3,675 95	432 25		69,767 70	
Cr. Percentages		Cr. 6,335 85							Cr.6,335 85	63,431 85
Naval cemetery					117 86					117 86
Vessels in Reserve		876 40			1,793 39	99 73				2,769 52
Esquimalt, B.C.—										
Dockyard						1,173 30				1,173 30
Stores		Cr. 5,235 49								Cr. 5,235 49
Supply base:—										
Dr. Operating expenses		27,955 31			4,190 20	2,566 00			34,711 51	
Cr. Percentages		Cr. 8,020 52							Cr 8,020 52	26,690 99
Repair Base:—										
Dr. Operating expenses					16,647 56	5,134 00			21,781 56	
Cr. Percentages					Cr19,275 84				Cr.19,275 84	2,505 72
New machinery					1,074 70					1,074 70
Fleet general					5,696 47	3,199 25				8,895 72
Arm. Supply Depot:—										
Stores		38,527 03								38,527 03
Dr. Operating expenses		24,132 13			7,403 07	1,936 00			33,471 20	
Cr. Percentages		Cr. 2,979 54							Cr 2,979 54	30,491 66
Naval cemetery					265 92					265 92
Vessels in reserve		9 98				405 95				415 93
	729,345 26	495,042 44	12,887 60	a. 77 75 b. 524 18	247,272 07	200,106 37	35,184 80	1,784 62		1,702,225 09

(c) Laid up Oct. 21, 1927, replaced by H.M.C.S. *Champlain*.
(d) Laid up Jan. 21, 1928, replaced by H.M.C.S. *Vancouver*.
(e) Commissioned at Portsmouth February 1st 1928.
(f) Commissioned at Portsmouth February 1st 1928.

8. GENERAL

H.M.S. *Calcutta* flagship and H.M.S. *Cairo, Capetown, Helitrope* and *Colombo* of the America and West Indies Squadron, cruised in Canadian waters from July 1 to October 10.

These ships accommodated R.C.N.V.R. Officers and men on board and provided seagoing experience and training for them. The department wishes to express appreciation of the valuable assistance and co-operation given by the Commander-in-Chief.

The general health of naval personnel has been excellent throughout the year.

I wish to express my satisfaction with the competent manner in which officers and men, civilian employees of the Naval Service in H.M.C. ships and establishments and at Naval Service Headquarters, Ottawa, have performed their duties during the past year.

I have the honour to be, sir,

Your obedient servant,

WALTER HOSE,
Commodore R.C.N.,
Chief of the Naval Staff.

DOMINION OF CANADA

REPORT OF THE WORK

OF THE

DEPARTMENT OF

PENSIONS AND NATIONAL HEALTH

FOR THE YEAR ENDING MARCH 31

1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable the Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Pensions and National Health, formerly the Department of Soldiers' Civil Re-establishment, for the fiscal year ended March 31, 1928.

I have the honour to be,
Your Excellency's most obedient servant,
J. H. KING,
Minister of Pensions and National Health.

December 31, 1928.

THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

Head Office.. .. ..Daly Building, Ottawa

MINISTER—The Hon. J. H. King, M.D.

DEPUTY MINISTER—J. A. Amyot, M.D., C.M.G.

ASSISTANT DEPUTY MINISTER—J. W. McKee.

DIRECTOR OF MEDICAL SERVICES—Ross Millar, M.D.

FINANCIAL CONTROLLER—G. W. F. Hodgins.

GENERAL EXECUTIVE ASSISTANT—A. M. Wright.

SECRETARY—E. H. Scammell, F.C.I.S.

District Offices—

"A" District, Province of Quebec—
Head Office, Labelle Building, Montreal, P.Q.
Branch Office, Merger Building, Quebec, P.Q. (Medical Clinic only).

"B" District, Nova Scotia and Prince Edward Island—
Camp Hill Hospital, Halifax, N.S.

"C" District, Eastern Ontario—
Head Office, 3rd Floor, Daly Building, Ottawa, Ont.
Branch Office, Post Office Building, Kingston, Ont.

"D" District, Central Ontario—
Head Office, Christie Street Hospital, Toronto, Ont.
Branch Office, Duffield Building, Jackson Street, Hamilton, Ont.

"F" District, Western Ontario—
Head Office, Westminster Hospital, London, Ont.
Branch Office, 21 Palace Theatre Building, 332 Ouellette Ave., Windsor, Ont.

"G" District, Manitoba—
Head Office, Commercial Building, Winnipeg, Man.
Branch Office, Customs Excise Warehouse, Port Arthur, Ont.

"H" District, Saskatchewan—
Head Office, Veteran Block, Regina, Sask.
Branch Office, Canada Building, Saskatoon, Sask.

"I" District, Alberta—
Head Office, 517 Eighth Avenue West, Calgary, Alta.
Branch Office, Strathcona Postal Station, Strathcona, Alta.

"J" District, British Columbia—
Head Office, Shaughnessy Hospital, Vancouver, B.C.
Branch Office, Post Office Building, Victoria, B.C.

"K" District, New Brunswick—
Lancaster Hospital, West Saint John, N.B.

Overseas Office—Canadian Building, Trafalgar Square, London, S.W.1, England.

CONTENTS

	Page
Introductory Letter	7
Medical Treatment	9
Total strength Departmental Institutions	9
Total strength other than Departmental Institutions	9
Medical classification patients on strength	11
Admissions, discharges, deaths	11
Total patient strength March 31, 1928	11
Comparative treatment strength 1921-28	11
Admissions to hospital 1915-28	12
Clinical treatments 1919-28	12
Admissions and discharges Allied forces	12
Veterans Care Cases	12
Dental Services	13
Orthopædic and Surgical Appliance Division	13
Blinded Soldiers	14
Employment	15
Relief	16
Sheltered Employment	16
Vocational Training	16
Industrial Problem Cases	17
Engineering Division	17
Returned Soldiers' Insurance	17
Accounts Branch	19
Summary of financial statement	20
Statement of income and expenditure (No. 1)	21
Net disbursements on pension 1916-28 (No. 2)	26
Net disbursements re-establishment 1915-28 (No. 3)	26
Current assets of Department (No. 4)	27
Vocational loans (No. 5)	27
Accounts receivable (No. 6)	27
Passenger, freight and express transportation (No. 7)	27
Appropriations by fiscal years (No. 8)	29
Workmen's Compensation	30
Staff of Department, with Classification	30
Disablement Fund	31
Regulations of Department under Order in Council P.C. 1842, dated October 18, 1928 (Appendix 1)	33
Canteen Fund Administration (Appendix 2)	53

INTRODUCTORY LETTER

TO REPORT OF THE

DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

The Hon. J. H. King, M.D., M.P.,
Minister of Pensions and National Health,
Ottawa.

Sir,—In accordance with your instructions, I have the honour to submit the attached report of the work of that division of the Department of Pensions and National Health which was previously the Department of Soldiers' Civil Re-establishment for the fiscal year 1927-28.

During the year an important administrative change has been effected in that by Order in Council passed on December 12, 1927, the Department of Soldiers Civil Re-establishment and the Department of Health were merged as one department. The necessary legislation giving effect to this merger was duly passed by Parliament and enacted as chapter 39 of the statutes of 1928.

The medical service, which is the most important feature of the work of the department, has expanded during the fiscal year under review. At the commencement of the year there were 2,839 patients on strength receiving treatment. At the end of the year the number had increased to 3,257. The number of men who received in-patient treatment during the year was 11,030 and clinical treatments were given by medical officers of the department in 102,580 cases. Of the number remaining in hospital at the end of the fiscal year, 1,764 were receiving treatment in departmental institutions and the balance in other institutions in Canada, the United States and Great Britain.

The manufacture of artificial limbs and other prosthetic appliances is being continued with excellent results. Owing to the experience now enjoyed by the staff of the department engaged in this work few, if any complaints are received. The all-metal limbs are gradually being supplied to all wearers.

Steady work is being carried on in connection with the after-care of the blind through the Canadian National Institute for the Blind.

There has been an increase in the Unemployment Relief issued, both as regards the number assisted and the amount expended. In 1926-27 the number of men was 4,079, in 1927-28, 4,182. In 1926-27 the amount expended was $333,222.02, in 1927-28, $390,004.02.

The department continues to provide vocational training for a certain limited number of cases in which there has been an increase in the service disability, or for other special causes, and endeavours to find suitable employment for them. Considerable assistance has been rendered by the Rehabilitation Committee in Montreal, which has rendered excellent service. In other areas the department co-operates with the Dominion-Provincial Employment Service in the placement of disabled ex-service men. While the number of unemployed pensioners shows an increase, this is partly due to the increased number now receiving pension. The actual percentage of the unemployed among pensioners has fallen from 4·9 to 4·8.

Notwithstanding the active co-operation of employers and others, the difficulties confronted by departmental officers in dealing with problem cases increases year by year and it has been found necessary to devote a great deal of intensive study thereto. The maintenance of Sheltered employment workshops has proved very beneficial in many instances, but the operation of these workshops is limited to market demands for the articles manufactured. Other cases are taken into departmental institutions, where they are provided with free board and lodging and such medical care as they may require. The number of those applying for this benefit is increasing.

In the last Annual Report an increase in the mortality rate among ex-members of the forces insured under the Returned Soldiers' Insurance Act was noted. It is gratifying to report that this year there has been a decrease. Figures for the past three years are as follows: 1925-26, 8·21 per thousand; 1926-27, 9·33 per thousand; 1927-28, 8·4 per thousand. Increased activity in connection with Returned Soldiers' Insurance will be reported next year owing to the re-opening of this legislation at the last session of Parliament.

The demand for reimbursement by Workmen's Compensation Boards and employers in respect of pensioners suffering injury or disease in industrial establishments has increased, notwithstanding that by Order in Council (P.C. 558), operative from the beginning of the fiscal year, the department could only assume liability in respect of pensioners of twenty-five per cent and upwards. Previously the pensionable limit was twenty per cent and upwards. The number of individual cases dealt with was 247, against 203 in the previous year, and the amount expended was $69,968.56, as against $57,113.19 in the previous year. The total number of cases dealt with since this legislation was enacted is 1,211, involving a total expenditure of $274,026.84.

Attached as an appendix to this report is a summary of the reports received from the Boards of Trustees and others handling the Canadian Canteen Fund and the Imperial Canteen Fund in Canada.

The total expenditure of the department shows a substantial increase during the fiscal year, the exact amount being $1,885,881.97. The major portion of this, however, represents increased pension payments, this amount being $1,718,607.26. Notwithstanding this greater expenditure and the larger amount of work involved thereby, the actual cost of administration, including salaries, etc., is only about $11,000 more than the previous year.

The following is an epitomized statement of the manner in which the funds appropriated by Parliament have been dealt with by the department:—

Direct payments to men and dependents		$43,131,385 83
Payments for services to men and dependents		3,813,812 29
Capital expenditures		31,686 26
Stores purchased		436,371 16
Payments to outside organizations		94,249 67
Recoverable expenditures		528,282 16
		$48,035,787 37
Insurance premiums revenue	$1,385,775 70	
Casual revenue	207,289 67	1,593,065 37
		$49,628,852 74
Administration expense		1,458,816 30
		$51,087,669 04
Expense of the Federal Appeal Board and the Board of Pension Commissioners		266,484 69
		$51,354,153 73

DEPARTMENTAL ADMINISTRATION EXPENSE

Treatment, Pensions and Returned Soldiers' Insurance	$1,458,816 30
Percentage—Departmental Administration	2·855%

ADJUDICATION OF PENSIONS

Board of Pension Commissioners	$100,834 47	
Federal Appeal Board	165,650 22	266,484 69
Percentage—Adjudication of Pensions		·518%
Total Administration and Adjudication Expenses		$1,725,300 99
Percentage—All Expense		3·359%

I have the honour to be, sir,
Your obedient servant,

J. A. AMYOT,
Deputy Minister.

OTTAWA, December 31, 1928.

MEDICAL TREATMENT

The following tables indicate the number of patients treated and their distribution during the fiscal year ending March 31, 1928, with comparative statements covering previous years:—

STATEMENT SHOWING TOTAL STRENGTH OF DEPARTMENTAL INSTITUTIONS ACCORDING TO MEDICAL CLASSIFICATION ON MARCH 31, 1928

Dist.	Institution	General		Mental		T.B.		Totals		Civilians	Q. & R.	Total Strength
		In-pats.	Out-pats.	In-pats.	Out-pats.	In-pats.	Out-pats.	In-pats.	Out-pats.			
A.	Ste. Annes Hospital	90		261	2	40		391	2	5		398
B.	Camp Hill Hospital	116	10			8		124	10			134
D.	Christie St. Hospital	324		4		58		386		1	1	388
F.	Westminster Hospital	40	2	396	2	1		437	4			441
G.	Deer Lodge Hospital	63		4		1		68			1	69
I.	Col. Belcher Hospital	84				1		85				85
J.	Shaughnessy Hospital	146	3	3		23		172	3		2	177
K.	Lancaster Hospital	71	1					71	1			72
	Total	934	16	668	4	132		1,734	20	6	4	1,764

STATEMENT SHOWING TOTAL STRENGTH OF OTHER THAN DEPARTMENTAL INSTITUTIONS ACCORDING TO MEDICAL CLASSIFICATIONS ON MARCH 31, 1928

Dist.	Institution	General		Mental		T.B.		Totals	
		In	Out	In	Out	In	Out	In	Out
A	Lake Edward Sanatorium, Lake Edward					4		4	
	St. Jean de Dieu, Longue Point			11				11	
	General Hospital, Montreal	1						1	
	Royal Victoria Hospital, Montreal	2				2		4	
	Jeffrey Hale Hospital, Quebec	1				1		2	
	Total	4		11		7		22	
B.	Highland View Hospital, Amherst	1						1	
	Falconwood Hospital, Charlottetown			1				1	
	Nova Scotia Hospital, Darmouth			35				35	
	Nova Scotia Sanatorium, Kentville	2				38		40	
	Total	3		36		38		77	
C.	General Hospital, Belleville	1						1	
	Ontario Hospital, Brockville			1				1	
	General Hospital, Kingston	27				4		31	
	Hotel Dieu, Kingston	18						18	
	Ontario Hospital (Rockwood), Kingston			2				2	
	St. Vincent de Paul Hospital, Kingston					2		2	
	Civic Hospital, Ottawa	60				5		65	
	Total	106		3		11		120	
D.	Calydor Sanatorium, Gravenhurst	3				19		22	
	Muskoka Cottage Sanatorium, Gravenhurst					2		2	
	Mountain Sanatorium, Hamilton	6				33		39	
	St. Joseph's Hospital, Hamilton	8				1		9	
	Ontario Hospital, Mimico			2				2	
	Ontario Hospital, Toronto	1		1				2	
	Isolation Hospital, Toronto	1						1	
	Ontario Hospital, Whitby	1		1				2	
	Total	20		4		55		79	

STATEMENT SHOWING TOTAL STRENGTH OF OTHER THAN DEPARTMENTAL INSTITUTIONS ACCORDING TO MEDICAL CLASSIFICATIONS ON MARCH 31, 1928—*Con.*

Dist.	Institutions	General		Mental		T.B.		Totals	
		In	Out	In	Out	In	Out	In	Out
F.	Ontario Reformatory Hospital, Guelph			2				2	
	Freeport Sanatorium, Kitchener					1		1	
	Byron Sanatorium, London	11				91	3	102	3
	Ontario Hospital, London			4				4	
	St. Joseph's Hospital, London	2						2	
	Victoria Hospital, London	45				1		46	
	General Hospital, Stratford	1						1	
	Grace Hospital, Windsor	3						3	
	Hotel Dieu, Windsor	4						4	
	Total	66		6		93	3	165	3
G	General Hospital, Brandon	5						5	
	Manitoba Sanatorium, Ninette	3				21		24	
	General Hospital, Port Arthur	1						1	
	St. Joseph's Hospital, Port Arthur	3				1		4	
	Prov. Mental Hospital, Selkirk			64				64	
	General Hospital, Winnipeg	70				5		75	
	St. Boniface Hospital, Winnipeg	126				1		127	
	St. Roch's Hospital, Winnipeg	2				4		6	
	Total	210		64		32		306	
H.	Prov. Mental Hospital, Battleford	1		55				56	
	Saskatchewan Sanatorium, Fort Qu'Appele	2				29		31	
	General Hospital, Moose Jaw	2						2	
	Providence Hospital, Moose Jaw	2						2	
	Holy Family Hospital, Prince Albert	2						2	
	Victoria Hospital, Prince Albert	1						1	
	General Hospital, Regina	6				1		7	
	Grey Nuns Hospital, Regina	16	1			1		17	1
	City Hospital, Saskatoon	6						6	
	Saskatoon Sanatorium, Saskatoon					12		12	
	St. Paul's Hospital, Saskatoon	4						4	
	Prov. Mental Hospital, Weyburn	2		23				25	
	Total	44	1	78		43		165	1
I	Brett Sanatorium, Banff	1						1	
	Grey Nuns Hospital, Daysland	1		1				2	
	Royal Alexandra Hospital, Edmonton	1						1	
	University Hospital, Edmonton	73				1		74	
	Prov. Mental Hospital, Oliver			34				34	
	Prov. Mental Hospital, Ponoka	7		11				18	
	Central Alberta Sanatorium, Robertson	2				14		16	
	Total	85		46		15		146	
J	Prov. Mental Hospital, Essondale	3		74	3			77	3
	Fernie Hospital, Fernie	2						2	
	Royal Inland Hospital, Kamloops	1						1	
	General Hospital, Kootenay Lake	2						2	
	Merritt Hospital, Merritt	1						1	
	Prov. Mental Hospital, Saanich			13				13	
	General Hospital, Salmon Arm	1						1	
	Br. Columbia Sanatorium, Tranquille	1				18		19	
	Jubilee Hospital, Vernon	1						1	
	Royal Jubilee Hospital, Victoria	14				3		17	
	St. Joseph's Hospital, Victoria	3				1		4	
	Total	29		87	3	22		138	3
K	Hotel Dieu, Campbellton		1						1
	Jordan Memorial San., River Glade	1				18		19	
	County Hospital, E. Saint John	1				11		12	
	Prov. Mental Hosp., W. Saint John			4				4	
		2	1	4		29		35	1
	Total Canada	569	2	339	3	345	3	1,253	8
M	Great Britain	31	2	41	3	10		82	5
U	United States	69	1	24		38	1	131	2
	Grand Total	669	5	404	6	393	4	1,466	15

SUMMARY

	General		Mental		T.B.		Totals	
	In	Out	In	Out	In	Out	In	Out
Departmental Institutions	934	6	668	4	132	.....	1,734	20
Other Institutions	669	5	404	6	393	4	1,466	15
Out patients class; attending office clinics	.....	20	.....	1	.....	1	.....	22
Total treatment strength	1,603	41	1,072	11	525	5	3,200	57

ADMISSIONS, DISCHARGES, DEATHS AND TOTAL PATIENT STRENGTH

1927	Admissions			Discharges			Deaths	Total strength
	General	Mental	T.B.	General	Mental	T.B.		
April	521	7	76	627	8	89	32	2,687
May	476	2	66	537	4	104	20	2,566
June	555	13	103	593	10	116	27	2,491
July	474	14	64	492	11	59	24	2,457
August	449	13	67	457	10	59	13	2,447
September	563	11	85	519	11	82	28	2,466
October	510	10	80	418	5	50	10	2,583
November	730	7	99	547	10	75	27	2,760
December	519	12	68	472	6	49	30	2,802
1928								
January	749	9	81	540	7	50	25	3,019
February	670	14	86	567	8	48	27	3,139
March	853	21	114	746	4	92	28	3,257
Totals	7,069	133	989	6,515	94	873	291	

The above figures include ex-imperials—Admissions 536
Discharges 510
Patient strength as at March 31, 1927 2,839
Patient strength as at March 31, 1928 3,257

Comparative Treatment Strength

The following statement shows the number of in-patients and out-patients as at the end of 1921, 1922, 1923, 1924, and the fiscal years ending March 31, 1925, 1926, 1927 and 1928.

All Institutions—Year	In-patients	Out-patients	Total
December 31, 1921	5,053	287	5,340
December 31, 1922	4,014	293	4,307
December 31, 1923	3,619	125	3,744
December 31, 1924	3,347	80	3,427
March 31, 1925	3,452	77	3,529
March 31, 1926	3,039	58	3,097
March 31, 1927	2,805	34	2,839
March 31, 1928	3,200	57	3,257

The following figures give the approximate number of admissions to hospital by the Military Hospitals Commission and the Department to March 31, 1928:—

July 1, 1915, to December 31, 1916, by the Military Hospitals Commission, approximately	22,742
January 1, 1917, to March 31, 1918	28,258
April 1, 1918, to December 31, 1919, by D.S.C.R.	36,625
January 1, 1920, to December 31, 1920	23,591
January 1, 1921, to December 31, 1921	13,890
January 1, 1922, to December 31, 1922	10,015
January 1, 1923, to December 31, 1923	8,516
January 1, 1924, to March 31, 1924	2,461
April 1, 1924, to March 31, 1925	7,978
April 1, 1925, to March 31, 1926	7,710
April 1, 1926, to March 31, 1927	7,243
April 1, 1927, to March 31, 1928	8,191
Total	177,220

CLINICAL TREATMENTS

May 1, 1919, to December 31, 1919	126,057
January 1, 1920, to December 31, 1920	447,142
January 1, 1921, to December 31, 1921	300,895
January 1, 1922, to December 31, 1922	216,991
January 1, 1923, to December 31, 1923	167,291
January 1, 1924, to March 31, 1924	42,156
April 1, 1924, to March 31, 1925	142,047
April 1, 1925, to March 31, 1926	134,248
April 1, 1926, to March 31, 1927	120,141
April 1, 1927, to March 31, 1928	102,580
Total	1,799,548

STATEMENT OF EX-MEMBERS OF THE ALLIED FORCES TREATED IN CANADA DURING THE FISCAL YEAR ENDING MARCH 31, 1928

—	On strength 1-4-27	Admissions	Discharges	Deaths	On strength 31-3-28
Australian		16	11		5
French		2	2		
Newfoundland	4	11	10		5
New Zealand	1	2	2		1
South African	3	2	1	1	3
United States	10	24	22	1	11
Total	18	57	48	2	25

VETERANS CARE CASES

The department has been authorized for some time past to provide institutional treatment for pensioners whose disability prevents them permanently from obtaining or continuing remunerative work and who, as a result, have or will become public charges.

On March 31, 1928, there were sixty-nine men in departmental institutions under this authority, distributed as follows:—

District	Institution	Strength
A	St. Anne's Hospital	15
B	Camp Hill Hospital	4
D	Christie Street Hospital	16
G	Deer Lodge Hospital	7
I	Colonel Belcher Hospital	8
J	Shaughnessy Hospital	18
K	Lancaster Hospital	1
		69

DENTAL SERVICES

The number of dental clinics in operation on March 31, 1928, totalled 11, being a reduction of 1 from the previous year. The staff employed by the Dental Division was reduced from 19 to 18, of whom 6 are employed on a part time basis.

Dental services, supplied during the fiscal year, through departmental dental clinics, dental representatives, and the United States Veterans' Bureau, totalled 27,993 clinical treatments.

ORTHOPÆDIC AND SURGICAL APPLIANCES DIVISION

This branch has continued to supply the beneficiaries of the department with such prosthesis as were necessitated on account of disabilities incurred during overseas or other service. With certain exceptions these are manufactured in the Orthopædic depots which are distributed in the various provinces throughout the Dominion.

The work throughout the year has been very satisfactory, and the most notable development was with regard to the production of all-metal artificial limbs. These are manufactured of Duralumin from component parts received from the J. E. Hanger Company of London, England, and exceptional success has been met with in the fitting by our depot staffs. To the end of the fiscal year, 406 of these all-metal limbs had been issued and production had been brought up to an average of 32 per month. Consideration is now being given by the department towards the production of the metal parts, to enable the complete all-metal limbs to be manufactured in the departmental factories.

The department still continues to manufacture willow artificial limbs of various types, in addition to manufacturing orthopædic boots and other appliances in the various districts in about the same yearly average, with a tendency towards increase.

It is pleasing to record that, in spite of the great economies which have already been effected in the past years in the manufacture of appliances by this division, the operation results for the year now under consideration again show a slight improvement.

The operatives who are employed consist chiefly of mechanics, limb fitters and makers, orthopædic bootmakers, makers of other appliances and those who are engaged in repair work. They are highly skilled in their various fields of work and together with their long and efficient service contribute to a great degree to the success of the factories.

RECORD OF APPLIANCES ISSUED UP TO AND INCLUDING MARCH 31, 1928

—	Delivered prior to April 1, 1927				Delivered from April 1, 1927, to March 31, 1928				
	Dominion of Canada	Workmen's Compensation Boards of Canada	London, Eng.	United States of America	Dominion of Canada	Workmen's Compensation Boards of Canada	London, Eng.	United States of America	Total
Legs (all types)	8,626	140	552	243	417	26	27	30	10,061
Arms (all types)	2,674	177	62	15	57	16	7	2	3,010
Orthopaedic boots	49,201	110½	935½	397	5,031	30½	152½	70	55,928
Peg legs	1,510	84	10	2	27	10	1	.....	1,644
Optidal supplies	25,691	225	333	303	1,593	66	37	50	28,298
Minor orthopaedic appliances	140,329½	1,172	4,697½	1,680	21,368	179	801	435	170,662
Repairs to legs	49,843	188	1,481	409	5,218	40	276	85	57,540
Repairs to arms	4,315	85	61	20	304	4	8	3	4,800
Repairs to boots	55,529	15	547	311	6,310	7	144	68	62,931
Repairs to all other appliances	12,893	17	319	26	1,234	7	51	21	14,568
Totals	350,611½	2,213½	8,998	3,406	41,559	385½	1,504½	764	409,442

BLINDED SOLDIERS

Aftercare of blinded ex-members of the forces has been principally dealt with under arrangement with the Canadian National Institute for the Blind. The institute with its services organized in various parts of Canada operates through its representatives or establishes such other contact as may be necessary in individual cases. It is not necessary to deal at length with the forms of service being given beyond listing as follows:—

1st. Book loans from Library.
2nd. Monthly Braille magazine.
3rd. Provision of raw material at cost price.
4th. Purchase for cash of products in excess of local sales.
5th. Employment in industries organized by Institute.
6th. Placement in private industries or occupation.
7th. Visiting, follow-up and advice with more or less continual contact by correspondence.
8th. Provision of poultry feed at cost price for poultry farmers.
9th. Provision of typewriter and Braille writer supplies and repairs.
10th. Provisions of brush-up courses through Home Teachers, etc., where necessary.
11th. Arrangement for substantial discounts on radio sets and auxiliary equipment.

Blinded soldiers are, with scarcely an exception, now settled down in their own homes or with relatives or friends and are following trades or occupations for which they were trained. In a certain number of cases original occupations have been given up owing to ill health or changed circumstances while in others opportunities have led to change. Listed below will be found occupational divisions with stated number of men following each line mentioned.

TABLE SHOWING OCCUPATIONS OF BLINDED SOLDIERS

Boot repairing and Matmaking	4
Broom making	3
Business for themselves	10
Employed with business firms	8
Employed with Government	1
Farming	6
General secretary	1
Instructor in Braille Stenography	1
Insurance	3
Joinery	4
Massage	17
Matmaking, Netting and Leather Work	5
Osteopathy	2
Piano tuning	1
Poultry farming, netting, etc	20
Reed basketry, rattan and willow work, netting	27
Returned to former occupations	2
Salesmanship	2
Stenographer with business firms	1
Stenographer with Government	4
Student at Oxford University	1
Translating and Teaching French	1
Unable or unwilling to work	34
	158
Deceased	16
	174

Of the above classified list 117 are resident in Canada, 36 in the British Isles, 1 in Belgium and 4 in the United States.

EMPLOYMENT

The arrangement with the Department of Labour, whereby the Employment Service of Canada undertook to carry on the work formerly done by the department in finding employment for disabled ex-service men, continues to prove very satisfactory.

Applications and placements of disabled ex-service men during the fiscal year ending March 31, 1928, Employment Service of Canada:—

Placements—permanent	2,276
Placements—temporary	5,159
Cancellations	4,432
Unemployed	1,660
Total	13,527

Montreal Rehabilitation Committee

This committee composed of prominent professional and business men under the chairmanship of General Sir Arthur W. Currie, G.C.M.G., K.C.B., has continued to secure excellent results.

Placements—permanent	351
Placements—semi-permanent	464
Placements—temporary	1,456
Cancellations	334
Unemployed	764
Total	3,369

Summary

Comparative statement of applications and placements of ex-service men during the fiscal years ending March 31, 1927-March 31, 1928.

Years ending	Applicants	Placements	Cancellations	Pending Placement
March 31, 1927	17,826	10,425	5,421	1,980
March 31, 1928	16,896	9,706	4,766	2,424

Applications for assistance in obtaining employment decreased 930.

The number of men for whom employment was found decreased 519, this is partially accounted for by decreased number of applicants.

The number of men who were shown as unemployed increased 344.

Total number of pensioners *in Canada*, March 31, 1928	42,193
Total number of pensioners *outside Canada*, March 31, 1928	8,442
Total number of Pensioners	50,635
Increase in number of pensioners over previous year	2,277

Of this number 2,424 were registered as unemployed.

Employment in Federal Civil Service

The Employment Division of the department maintains a close liaison with the Civil Service Commission, and all federal departments for the purpose of assisting disabled former members of the forces to obtain employment in the federal Civil Service.

All applications from ex-service men for employment in the Civil Service received by the Employment Service of Canada are dealt with through the department.

RELIEF

Relief was granted during the winter of 1927-28 to 4,182 men. This relief —which is not given in cash but by an issue of orders, payable by the department, on grocers, coal dealers, etc.—was given 38,373 times, or an average of 9·18 times per man. The actual expenditure amounted to $390,004.02.

SHELTERED EMPLOYMENT

The department continues to operate Sheltered Employment Workshops, wherein Canadian pensioners who are unfitted for employment in the general labour market are admitted subject to certain conditions.

The need for these workshops was carefully investigated by the parliamentary committee during the session and this need was fully recognized, as well as the necessity for their enlargement, to take care of the increasing problem.

During the year, results have been on the whole very satisfactory, although in each Workshop the competition of the ordinary manufacturer has been felt and a constant endeavour has to be made to produce new lines, or undertake manufacture which will as little as possible interfere with ordinary industry.

The workshop which was in operation at Saint John, N.B., was closed down on March 31, 1928, as the activities were carried on under many difficulties and the need for a workshop in that city was not so necessitous as elsewhere. The remaining problem cases have been taken care of under other arrangements by the department.

Arrangements are under way just now whereby the department, at the request of the Red Cross Society, will take over the operations and management of the workshop at Montreal, the effective date of the change being May 1, 1928.

The shop at Hamilton, Ont., was badly handicapped on account of the accommodation, and new premises were acquired and fitted up and the change over takes place on April 1, 1928.

The department still continues to manufacture in its workshops the poppies and wreaths which are distributed on Armistice Day and it is very pleasing to report a good increase in sales this year, particularly so with the wreaths, where a direct effort has been made to interest the public and increase sales, as it was felt that there was room for a very appreciable improvement.

VOCATIONAL TRAINING

Vocational training, and compensation while undergoing such training, may still be given to the following two classes:—

1. To a former member of the forces who is prevented—owing to an increase in his pensionable disability—from following either his principal prewar or principal post-war occupation, or the occupation for which he was previously trained.

2. To a former member of the forces where pensionable disability has not increased but who has not been granted previous training and who, in the opinion of the department, having endeavoured to follow his pre-war occupation is now unable to do so.

INDUSTRIAL PROBLEM CASES

A disabled former member of the forces (also a disabled former member of the Imperial Forces who was a pre-war resident of Canada) who is not eligible for vocational training but who has become an industrial problem case owing to his inability to secure or hold steady employment, may be given probational training along specific lines, with an industry or firm, and while undergoing such training his pension may be augmented to a rate fixed under Order in Council.

ENGINEERING DIVISION

The following services come under the responsibility of the Engineering Division:—

Maintenance and repairs to buildings, mechanical services, fuel supply, fire protection, rentals, taxes and water rates, mechanical transport, laundries and gardening operations.

During the past year maintenance and repairs have been kept well within the estimates, and a certain amount of new work has been undertaken. A three-year exterior painting program was finished this year covering the exterior of several of the larger institutions.

Special care has been given to adequate fire protection in departmental hospitals, with a consequent revision of fire protection regulations. Arrangements have been made in certain institutions to tie up fire alarm system with that of the municipality.

Laundry operations are being carried on in the two psychopathic hospitals only. The average cost per piece has been kept well within that of last year, and at a considerably less rate than could be done if let by contract.

The beautification scheme started a few years ago in connection with departmental institutions has progressed in a favourable degree. A large number of donations of trees and shrubs have been made to certain institutions. The work is carried out almost entirely by patients or our service staff.

RETURNED SOLDIERS' INSURANCE DIVISION

The work of the division during the past year has been concerned with the collection of the premiums payable on account of the insurance in force, the various adjustments necessary in policies and the settlement of death claims.

The number of death claims admitted during the year is 210 being 41 less than the previous year. The death rate is lower than the rate for the previous year—being 8·4 per thousand as against 9·33. There has been a net increase in lapses of 378 during the year bringing the total net lapses to 6,992. A decrease is noted in the number of policies which have been surrendered for cash, the total number of surrenders to the end of the year from the commencement of the Returned Soldiers' Insurance Act is 2,329.

There has been considerable increase in the balance of the fund. As at the end of the year March 31, 1927, the balance was $5,090,041.62. The balance as at March 31, 1928, was $5,964,246.99; the balance, therefore, has increased through the year by an amount of $874,205.37.

STATEMENT FOR PERIOD APRIL 1, 1927-MARCH 31, 1928

Policies

Surrendered for cash to March 31, 1927	1,734	$ 3,956,500 00
" " " 1927-28	595	1,399,500 00
Total surrendered for cash	2,329	$ 5,356,000 00
Reduced paid-up insurance to March 31, 1927	70	36,940 50
" " " 1927-1928	18	18,469 00
Reduced paid-up insurance in force	88	$ 55,409 50
On extended term insurance to March 31, 1927	1,927	$ 4,339,000 00
" " " " 1927-1928	1,006	2,299,000 00
	2,933	$ 6,638,000 00
Extended term insurance terminated (Including those shown as surrendered for cash)	941	2,182,500 00
Total policies on extended term insurance	1,992	$ 4,455,500 00
Disability claims admitted to March 31, 1927	24	46,787 77
" " " 1927-1928	8	28,000 00
	32	$ 74,787 77
Terminated or reduced	7	20,818 08
Disability claims in force	*25	$ 53,969 69

Death Claims

Policy value of death claims to March 31, 1927	1,530	$ 4,437,950 00
" " " " " 1927-1928	210	483,200 00
Total policy value	1,740	$ 4,921,150 00
Settled by cash payment or annuity to March 31, 1927	1,122	$ 3,344,100 00
" " " " " 1927-1928	171	414,183 33
Total settled	1,293	$ 3,758,283 33
Insurance and premiums paid under Sec. 10 R.S.I. to March 31, 1927	357	187,854 82
Insurance and premiums paid under Sec. 10 R.S.I. 1927-1928	47	39,548 03
Total	404	$ 227,402 85
Claims pending settlement March 31, 1928	43	$ 96,750.00

Lapses and Reinstatements

Lapses to March 31, 1927	22,357	$50,587,500 00
1927-28	3,057	7,044,000 00
Total	25,414	$57,631,500 00
Reinstatements to March 31, 1927	15,743	$35,732,000 00
1927-1928	2,679	6,195,500 00
Total	18,422	$41,927,500 00
Net lapses	6,992	15,704,000 00

Income and Expenditure

	Dr.	Cr.
Balance of fund March 31, 1927	$5,090,041 62	
Income 1927-1928	1,386,349 73*	
Interest 1927-1928	212,247 32	
Expenditures 1927-1928		$ 724,391 68*
Balance		5,964,246 99
	$6,688,638 67	$ 6,688,638 67
Policies in force March 31, 1928	25,010	$54,892,529 19

* These figures are each $574.03 in excess of those shown on the financial statement of the Department due to the inclusion of premiums paid by cheques which were dishonoured but subsequently paid.

ACCOUNTS BRANCH

Cost accounts are maintained to control the activities of the various departmental hospitals, pension examination centres, clinics, O. and S.A. depots and Vetcraft factories operated by the department.

All subsidiary ledgers and books of original entry maintained at Head Office and the various outside Units of the department are in balance with the relative control accounts kept in the general ledger at Head Office.

The various items of income and expenditure are in agreement with the amounts shown in the Public Accounts and Auditor General's reports.

Complete details of the financial operations will be found in the statements which follow. These statements are shown in the same form as in preceding years; a short description of each is given:—

1. *Income and Expenditure, Fiscal Year 1927-28.*—On the left side is shown the appropriations granted by Parliament: revenue received from all sources, together with the balances of trust funds as at the first of the year. On the right side is shown the gross disbursements made, divided into direct payments to men and their dependents, both on account of pensions and re-establishment, payments for services rendered such men, and payments made to outside organizations which render service to returned men, unexpended portions of the appropriations voted by Parliament for the fiscal year and the balances of trust funds at the close of the year.

The summary statement covers the main divisions of the department's income and expenditure condensed for reference purposes.

2. *Net Disbursements on Pensions Account for the Period, April 1, 1916, to March 31, 1928, by Fiscal Years.*

3. *Net Disbursements of the Department of Soldiers' Civil Re-Establishment on Re-Establishment Account for the Period, July, 1915, to March 31, 1928, by Fiscal Years.*

4. *Current Assets of the Department as at March 31, 1928.*—Cash advances made for travelling, petty cash, maintenance accounts, outside institutions, Red Cross Workshops, etc.

Stores.—Value food, equipment, etc., held by department for use in hospitals, offices, etc.

Disposal Stores.—Surplus goods available for sale or transfer to other Government departments.

5. *Vocational Loans as at March 31, 1928.*—Outstanding loans distributed by provinces.

6. *Accounts Receivable at March 31, 1928.*—Amounts due from Great Britain, British Dominions, United States and Allied Governments for treatment of their ex-nationals, services rendered Canadian Government departments—Department of National Defence, Department of Indian Affairs, etc.—amounts due from outside hospitals and sanatoria.

7. *Passenger, Freight and Express Transportation as at March 31, 1928.*—Services of the department on which passenger transportation expense was incurred; freight and express on goods purchased, shipped, etc.; distributed according to railways used.

8. *Department of Soldiers' Civil Re-establishment and Pensions Appropriations by Fiscal Years to March 31, 1929.*

SUMMARY OF FINANCIAL STATEMENT, FISCAL YEAR, 1927-28

Appropriations—Pensions		$39,445,000 00
" Re-establishment		7,445,272 40
Revenue		2,152,714 40
Casual Revenue		207,370 00
Deposits to Trust Funds, 1927-28	$2,062,635 61	
Balance of Trust Funds at March 31, 1927	5,816,447 89	
		7,879,083 50
		$57,129,440 30

Direct payments to Men and Dependents—			
Canadian Pensions	$39,392,870 76		
Re-establishment	3,738,515 07		
		$43,131,385 83	
Payments for Services to Men and Dependents		3,813,812 29	
Capital Expenditures		31,686 26	
Stores purchased		436,371 16	
Payments to Outside Organizations not under control of the Department		94,249 67	
Recoverable Expenditures		528,282 16	
			$48,035,787 37
Cost of Administration		1,458,816 30	
			$49,494,603 67
Casual Revenue		207,289 67	
			$49,701,893 34
Federal Appeal Board		165,650 22	
			$49,867,543 56
Balance of Trust Funds, March 31, 1928		6,644,406 87	
Unexpended Appropriations—Pensions	$ 194,236 33		
" " Re-Establishment	423,253 54	617,489 87	
			$57,129 440 30

No. 1—STATEMENT OF INCOME AND EXPENDITURES AS PER STATEMENTS RENDERED TO THE AUDITOR GENERAL, FISCAL YEAR ENDED MARCH 31, 1928

APPROPRIATIONS AND REVENUE

APPROPRIATIONS

Pensions—			
Vote 88 European War Pensions....	$37,000,000 00		
377 " "	1,600,000 00		
		$38,600,000 00	
86 N.W. Rebellion, 1885 and General.....		40,000 00	
87 Pensions—Civil Flying.....		5,000 00	
Statute—Militia Pensions Act, 1901.....		800,000 00	
			$39,445,000 00
Re-Establishment—			
Statute Salary—Minister of Department.....		$ 10,000 00	
Vote 28 Civil Government.....		21,560 00	
289 Care of patients.....		2,200,000 00	
290 Salaries.....		2,725,000 00	
291 Pay and Allowances.....		1,350,000 00	
292 Vocational Loans.....		3,000 00	
293 Interest on Trust Funds.....		22,500 00	
294 Unemployment Relief....	$ 250,000 00		
394 " "	200,000 00		
		450,000 00	
295 Operating.....		250,000 00	
296 Employers' Liability Compensation.....		75,000 00	
297 Sheltered Employment.....		175,000 00	
298 Federal Appeal Board....	$ 130,000 00		
Statute Salaries—Members, Federal Appeal Board.....	31,000 00		
		161,000 00	
Statute Miscellaneous Gratuities..		2,212 40	
			7,445,272 40

DISBURSEMENTS

DIRECT PAYMENTS TO MEN AND DEPENDENTS

Pensions—			
European War Pensions—			
Pensions.....	$35,036,157 75		
Retroactive Adjustments.....	1,947,736 08		
First Payments—B.P.C. Awards..	812,043 73		
Federal Appeal Board Awards....	361,362 28		
Gratuities.....	129,543 82		
Final Payments.....	23,527 13		
New Zealand Pensions (recoverable)	12,936 80		
Supplementary—Imperial.....	227,477 39		
Supplementary—French, Italian, etc.	26,593 63		
Burial Grants.....	25,378 42		
		$38,602,757 03	
Militia Pensions Act, 1901.....		759,184 21	
Northwest Rebellion, 1885 and General.....		30,689 52	
Civil Flying.....		240 00	
			$39,392,870 76
Pay and Allowances—			
Treatment.....	$ 1,900,207 09		
Allowances—Pensioners.....	52,381 62		
Training.....	17,568 70		
		$ 1,970,157 41	
Vocational Loans.....		835 61	
Interest on Trust Funds.....		21,032 03	
Unemployment Relief.....		390,004 02	
Sheltered Employment—Wages to Operatives in Department Workshops.....		121,809 37	
War Service Gratuity.....		6,349 66	
Funds under Administration.....		504,509 32	
Returned Soldiers' Insurance—			
Death Benefits.....	$ 185,994 05		
Annuities.....	394,065 36		
Disability Benefits.....	4,918 08		
Cash Surrender Values.....	118,667 50		
Return of Premiums.....	13,557 97		
Renewal Premiums Refunded.....	6,614 69		
		723,817 65	
			3,738,515 07

STATEMENT OF INCOME AND EXPENDITURE AS PER STATEMENTS RENDERED TO AUDITOR GENERAL FISCAL YEAR ENDED MARCH 31, 1928—*Continued*

APPROPRIATIONS AND REVENUE—*Con.*

Revenue—			
Vote 28	Civil Government	$ 74 51	
289	Care of Patients	382,741 54	
290	Salaries	72,211 99	
291	Pay and Allowances	792,795 66	
292	Vocational Loans	150 28	
293	Interest on Trust Funds	321 88	
294	Unemployed Relief	2,829 06	
295	Operating	487,007 03	
296	Employers' Liability Compensation	1,117,60	
297	Sheltered Employment	264,250 75	
298	Federal Appeal Board	7,107 01	
88	European War Pensions	142,098 31	
Statute—	Militia Pensions Act 1901	8 78	
			$2,152,714 40
Casual Revenue—			
	Re-establishment	180,691 59	
	Pensions	26,678 41	
			207,370 00
Funds—			
	Returned Soldiers' Insurance—		
	Balance at March 31, 1927	$ 5,090,041 62	
	Revenue—Premiums	$ 1,385,775 70	
	—Interest on the Fund	212,247 32	
		1,598,023 02	

DISBURSEMENTS—*Con.*

Re-Establishment

Payments for Services to Men and Dependents

Hospital Treatment—			
Departmental Hospitals		$ 2,020,830 64	
Outside Hospitals and Sanatoria		1,239,850 84	
Dental Treatment		43,124 17	
Limb Factory Operations—			
Factory Operations	$ 178,946 49		
Outside Purchases and Repairs	29,913 24		
Appliances Issued and Repairs	60 83		
		208,920 56	
Transportation—			
Patients and Escorts	$ 56,535 68		
Pensioners	55,017 58		
Travelling Medical Boards	10,805 77		
		122,359 03	
Funeral Expenses		24,416 96	
Sheltered Employment—			
Halifax Vetcraft Shop	$ 10,069 19		
Saint John Vetcraft Shop	2,092 84		
Kingston Vetcrafg Shop	1,320 00		
Toronto Vetcraft Shop	41,800 57		
Hamilton Vetcraft Shop	12,889 79		
London Vetcraft Shop	764 20		
Winnipeg Vetcraft Shop	8,050 26		
Regina Vetcraft Shop	1,189 33		
Calgary Vetcraft Shop	618 89		
		78,795 07	
Vocational Training		1,355 89	
Transportation of Blinded Former Soldiers		1,311 16	
Employers' Liability Compensation—			
Quebec	2,552 19		
Nova Scotia	2,079 60		
Ontario	22,237 62		
Manitoba	38,181 86		
Saskatchewan	936 95		
Alberta	6,148 26		
British Columbia	711 49		
		72,847 97	
Capital Expenditures			31,686 26
Stores Purchased—			
General Treatment and O. & S.A. Stores		$ 297,216 26	
Vetcraft Stores		139,154 90	
			436,371 16

War Service Gratuity—			
Balance at March 31, 1927		175,087 14	
Revenue—Interest on the Fund		5,726 61	
Funds under Administration			
Balance at March 31, 1927		551,319 13	
Revenue—Pensions and other moneys	443,580 56		
—Interest on the Fund	15,305 42		
		458,885 98	
			7,879,083 50

PAYMENTS TO OUTSIDE ORGANIZATIONS NOT UNDER CONTROL OF DEPARTMENT

Last Post Fund		12,000 10	
Canadian National Institute for the Blind		4,591 03	
Red Cross Society for Sheltered Employment—			
Montreal	$ 8,367 17		
Vancouver	17,501 82		
Victoria	8,484 60		
		34,353 59	
Rehabilitation—			
Montreal	13,540 26		
Toronto	29,462 44		
Calgary	302 25		
		43,304 95	
			94,249 67

RECOVERABLE EXPENDITURES—

Cash Advances	353,679 18	
Accounts Receivable	166,630 06	
War Office, Great Britain, for Shanghai Defence Force	7,972 92	
		528,282 16

COST OF ADMINISTRATION

Salaries—		
Minister and Permanent Staff	$ 30,070 00	
Executive and General	195,461 75	
Sheltered Employment	2,070 00	
Pay and Pensions	67,168 51	
Purchasing and Stores	115,556 57	
Engineering	48,025 49	
Records and Central Registry	148,627 03	
Investigators	53,522 44	
Accounts	152,019 29	
Canadian Pensions and Mechanical	149,908 77	
Audits	31,257 75	
Insurance	50,685 45	
Medical Services	240,650 73	
Dental Services	6,923 07	
		$ 1,291,946 85
General—		
Telegrams, Telephones, Postage, etc.	$ 27,647 05	
Transportation and Travelling	25,239 89	
Transportation and Travelling—Investigators	17,974 11	

STATEMENT OF INCOME AND EXPENDITURES AS PER STATEMENTS RENDERED TO AUDITOR GENERAL FISCAL YEAR ENDED MARCH 31, 1928—*Concluded*

APPROPRIATIONS AND REVENUE—*Concluded*

DISBURSEMENTS—*Concluded*

COST OF AMINISTRATION—*Concluded*

General—Con.			
Stationery and Office Supplies	$43,753 93		
Rent, Taxes, Insurance and Bonding	771 14		
Light, Heat, Power and Water Rates	1,408 78		
Janitors' Supplies	4,294 30		
Maintenance and Repair to Buildings, Equipment and Furniture	4,247 66		
Automobile Expense	7,487 16		
Freight and Express	2,689 12		
Special Publicity	2,462 10		
Miscellaneous Expense	28,894 21		
		166,869 45	
			1,458,816 30
			$49,494,603 67

CASUAL REVENUE

Re-Establishment	180,611 26	
Pensions	26,678 41	
		207,289 67
		$49,701,893 34

FEDERAL APPEAL BOARD

Salaries—Members of Board	31,000 00	
Salaries—Staff	58,746 55	
Salaries—Soldiers' Advisers	32,974 65	
General Expense of Board	31,031 84	
General Expense of Soldiers' Advisers	11,897 18	
		165,650 22
		$49,867,543 56

FUNDS

Returned Soldiers' Insurance—		
Balance as at March 31, 1927	$ 5,090,041 62	
Revenue	1,598,023 02	
	$ 6,688,064 64	
Disbursements	723,817 65	
Balance as at March 31, 1928		$ 5,964,246 99

War Service Gratuity—			
Balance as at March 31, 1927	$ 175,087 14		
Revenue	5,726 61		
	$ 180,813 75		
Disbursements	6,349 66		
Balance as at March 31, 1928		174,464 09	
Funds Under Administration—			
Balance as at March 31, 1927	$ 551,319 13		
Revenue	458,885 98		
	$ 1,010,205 11		
Disbursements	504,509 32		
Balance as at March 31, 1928		505,695 79	
			$ 6,644,406 87
UNEXPENDED APPROPRIATIONS			
Pensions—			
Vote 86 N.W. Rebellion 1885 and General	$ 9,310 48		
87 Civil Flying	4,760 00		
88 European War	139,341 28		
Statute Militia Pensions Act 1901	40,824 57		
		194,236 33	
Re-Establishment—			
Vote 28 Civil Government	$ 1,564 51		
289 Care of Patients	107,660 52		
290 Salaries	36,615 50		
291 Pay and Allowances	173,026 24		
292 Vocational Loans	2,324 94		
293 Interest on Trust Funds	1,789 85		
294 Unemployment Relief	19,520 09		
295 Operating	32,825 77		
296 Employers' Liability Compensation	3,305 12		
297 Sheltered Employment	42,164 21		
298 Federal Appeal Board	2,456 79		
		423,253 54	
			617,489 87
Grand Total Appropriations, Revenue and Funds			$57,129,440 30
Grand Total Disbursements and Unexpended Balances			$57,129,440 30

No. 2.—NET DISBURSEMENTS ON ACCOUNT OF PENSIONS—APRIL 1, 1916, TO MARCH 31, 1928

Details	Total	April, 1916, to March, 1922	Fiscal Year 1922-23	Fiscal Year 1923-24	Fiscal Year 1924-25	Fiscal Year 1925-26	Fiscal Year 1926-27	Fiscal Year 1927-28
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
European War Pensions	328,208,995 94	119,578,749 40	31,911,867 40	32,264,130 35	33,630,189 78	35,822,629 11	36,567,374 35	38,434,055 55
North West Rebellion	351,811 81	136,158 67	41,575 39	39,343 22	34,796 36	33,961 34	35,332 31	30,644 52
Fenian Raid	8,083 54	5,688 88	632 50	633 00	466 25	662 91	.....	.....
Militia Long Service	5,532,598 92	1,438,469 85	559,577 30	639,562 83	695,249 27	697,215 79	743,378 69	759,145 19
Civil Flving	2,869 22	.....	.....	2,005 17	144,05	240 00	240 00	240 00
Pensions Administration	5,886,981 90	5,886,981 90	.....	.....	.....	.....	.....	.....
Total Cost of Pensions	339,991,341 33	127,046,048 70	32,513,652 59	32,945,674 57	34,360,845 71	36,554,709 15	37,346,325 35	39,224,085 26

NOTE.—From April 1, 1921, the Administration Expenses of the Board of Pension Commissioners are included with Soldiers' Civil Re-establishment expenditures.

No. 3.—NET DISBURSEMENTS ON ACCOUNT OF RE-ESTABLISHMENT FROM JULY, 1915 TO MARCH 31, 1928

Details	Total	Julv, 1915, to March, 1922	Fiscal Year 1922-23	Fiscal Year 1923-24	Fiscal Year 1924-25	Fiscal Year 1925-26	Fiscel Year 1926-27	Fiscal Year 1927-28
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
General Administration	20,416,488 23	11,754,470 39	2,078,874 56	1,722,068 75	1,382,235 91	1,222,561 03	1,113,269 67	1,143,007 92
Imperial Pension Office	503,009 84	.....	131,059 49	125,953 07	122,677 24	121,529 06	1,790 98	.....
Care of Patients and Medical Examination of Pensioners	60,989,423 01	29,882,911 67	7,067,863 59	5,941,399 54	5,166,024 53	4,837,677 64	4,202,780 04	3,890,766 00
Orthopaedic, Ophthalmic and Surgical Appliances	3,696,136 93	1,997,136 15	328,750 69	322,673 62	285,433 62	238,620 95	251,876 10	271,645 80
Vocational Training and Loans Expense	11,847,850 66	11,766 909 91	64,192 05	6,104 97	4,278 93	3,784 44	1,347 80	1,232 56
Unemployment Relief	5,517,726 45	2,606,422 87	1,024,414 95	311,132 53	427,145 71	348,946 76	371,606 66	428,056 97
Information and employment	1,248,265 11	1,159,296 28	83,214 53	5,754 30	.....	.....	.....	.....
Sheltered employment	1,486,589 04	.....	125,345 54	292,129 09	325,456 06	402,671 98	379,400 44	*38,414 07
Pay and allowances—								
Treatment	24,561,929 75	14,517,127 48	2,817,495 85	2,036,368 73	1,916,106 09	1,200,797 22	984,230 15	1,089,804 23
Training	31,449,918 99	30,839,550 93	374,245 21	109,355 95	59,504 59	29,861 13	21,026 42	16,374 76
Federal Appeal Board	702,263 71	.....	.....	85,862 40	164,354 70	145,244 50	148,551 78	158,250 33
War and provisional bonus	3,828,986 28	3,016 895 70	334,803 12	301,463 04	175,851 42	.....	.....	.....
Miscellaneous	1,746,309 23	636,483 86	188,341 58	231,964 61	229,666 57	202,232 09	165,644 77	91,975 75
Gross operating expense	167,994,897 23	108,177,205 24	14,618,601 16	11,492,203 60	10,258,735 37	8,753,926 80	7,641,524 81	7,052,700 25
Operating revenue	8,459,918 22	1,744,956 03	1,318,066 30	1,403,307 54	1,542,812 16	1,182,501 59	893,853 30	374,421 30
Net operating expense	159,534,979 01	106,432,249 21	13,300,534 86	10,088,896 06	8,715,923 21	7,571,425 21	6,747,671 51	6,678,278 95

*Credit.

No. 4.—STATEMENT SHOWING DISTRIBUTION OF CURRENT ASSETS BY PROVINCES AS AT MARCH 31, 1928

Unit	Province	Total	Cash advances	Treatment stores	Vetcraft stores	Disposal stores
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
H.O.	Ottawa	2,203 88	1,889 45	.....	.....	314 43
"A"	Quebec	53,742 97	.....	52,707 48	.....	1,035 49
"B"	Nova Scotia and P.E.I.	29,127 74	.....	8,824 08	18,784 67	1,518 99
"C"	Eastern Ontario	3,055 38	.....	3,055 38	.....	.....
"D"	Central Ontario	195,359 19	.....	90,037 90	93,310 53	12,010 76
"F"	Western Ontario	22,297 74	.....	21,568 16	.....	729 58
"G"	Manitoba	27,174 27	475 00	7,796 61	18,543,70	358 96
"H"	Saskatchewan	6,557 57	835,00	5,559 36	.....	163 21
"I"	Alberta	11,457 97	.....	11,172 37	.....	285 60
"J"	British Columbia	14,272 05	606 00	13,666 05	.....	.....
"K"	New Brunswick	10,602 48	.....	4,763 53	451 94	5,387 01
"M"	London, England	26 21	.....	26 21	.....	.....
	Total	375,877 45	3,805 45	219,177 13	131,090 84	21,804 03

No. 5.—STATEMENT SHOWING DISTRIBUTION OF VOCATIONAL LOANS BY PROVINCES AS AT MARCH 31, 1928

Quebec	$ 1,419 38
Nova Scotia and Prince Edward Island	2,488 29
Eastern Ontario	2,667 47
Central and Western Ontario	10,467 69
Manitoba	2,454 78
Saskatchewan	1,945 43
Alberta	5,302 99
British Columbia	4,274 25
New Brunswick	2,227 96
Total	$33,248 24

No. 6.—ACCOUNTS RECEIVABLE AS AT MARCH 31, 1928

Great Britain	$ 34,464 66
Imperial Ministry of Labour	88,035 40
British Dominions, U.S.A. and other allied Governments	22,325 18
Canadian Government Departments	14,858 68
Vetcraft Workshops	36,059 54
Other Miscellaneous Accounts	14,463 75
Total	$ 210,207 21

No. 7.—TRANSPORTATION EXPENDITURE, FISCAL YEAR 1927-28

Service	Total expenditure
Administrative Personnel	$ 5,843 78
Investigations Administrative and Pensions	3,197 55
Medical Personnel and Nurses	4,824 93
Investigations, Medical and Pensions	2,309 22
Men called in for treatment or orthopaedic repairs	38,326 86
Men called in for clinical treatment	3,837 02
Transportation of deceased patients and escorts thereto	393 79
Travelling Medical Boards	2,736 03
Pensioners examination	41,298 81
Vetcraft Staff travelling	435 22
Last Post Fund*	105 57
Blind ex-Members of the Forces (Part recoverable) see Revenue vote No. 297	1,186 28
Men taking vocational training	64 45
Transportation in lieu of unemployment relief	620 50
Staff O. and S. A. Branch	1,280 94
Members, Federal Appeal Board	6,403 52
Soldiers' Advisors, Federal Appeal Board	863 47
Successful Appellants, Federal Appeal Board	45 97
Ex-Imperial Appellants, Federal Appeal Board	222 26
	$ 113,996 17
Freight and Express	16,682 24
Total Net Expenditure	$ 130,678 41
Accounts Receivable	15,347 58
Total Gross Expenditure	$ 146,025 99

DISTRIBUTION BY RAILWAYS

		%	
Passenger—			
Canadian National Railways	$82,069 10	63·5	
Canadian Pacific Railway	37,311 83	28·8	
Sundry Railways	9,962 82	7·7	
Total		100·0	$ 129,343 75
Freight and Express—			
Canadian National Railways	$ 7,184 81	43·1	
Canadian Pacific Railway	2,081 29	12·5	
Canadian National Express	5,822 03	34·9	
Canadian Pacific Express	860 66	5·1	
Sundry Railways	733 45	4·4	
Total		100·0	$ 16,682 24
Total amount paid to Railways			$ 146,025 99

No. 8.—DEPARTMENT OF SOLDIERS' CIVIL RE-ESTABLISHMENT AND PENSIONS APPROPRIATIONS BY FISCAL YEARS FROM 1921-22 TO 1928-29

—	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
SOLDIERS' CIVIL RE-ESTABLISHMENT—								
Civil Government	71,660 00	40,820 00	39,200 00	28,820 00	21,500 00	21,560 00	21,560 00	14,920 00
Capital	235,000 00	75,000 00	30,000 00	10,000 00	10,000 00	10,000 00	.....	.....
Care of patients	5,250,000 00	4,000,000 00	3,500,000 00	2,600,000 00	2,350,000 00	2,350,000 00	2,200,000 00	2,450,000 00
Vocational expense	325,000 00	85,000 00	50,000 00	20,000 00	5,000 00	5,000 00	.....	.....
Salaries	6,125,000 00	5,425,000 00	4,425,000 00	3,553,000 00	3,100,000 00	2,850,000 00	2,725,000 00	2,725,000 00
Pay and allowances	5,750,000 00	3,900,000 00	3,200,000 00	2,100,000 00	1,810,000 00	1,490,000 00	1,350,000 00	1,920,000 00
Operating	1,500,000 00	700,000 00	600,000 00	450,000 00	400,000 00	300,000 00	250,000 00	290,000 00
Unemployment relief	2,100,000 00	1,050,000 00	500,000 00	200,000 00	350,000 00	375,000 00	450,000 00	250,000 00
Vocational loans	150,000 00	75,000 00	35,000 00	20,000 00	10,000 00	3,000 00	3,000 00	2,000 00
Interest on funds	10,000 00	18,500 00	22,000 00	22,000 00	20,000 00	25,000 00	22,500 00	21,000 00
Employers' Liability Compensation	100,000 00	175,000 00	75,000 00	30,000 00	75,000 00	75,000 00	75,000 00	100,000 00
Civil Pay—G.T.R. employees	60,000 00	.....	.....	.....	.....	.....	.....	.....
Sheltered employment	.....	470,000 00	375,000 00	390,000 00	250,000 00	225,000 00	175,000 00	175,000 00
Medical Appeal Board	.....	.....	50,000 00	.....	.....	.....	.....	.....
Federal Appeal Board	.....	.....	357,996 00	150,000 00	150,000 00	130,000 00	130,000 00	130,000 00
Repatriation	.....	.....	25,000 00	.....	.....	.....	.....	.....
Special publicity	.....	.....	20,000 00	5,000 00	5,000 00	3,000 00	.....	.....
Grant to Canadian Legion B.E.S.L.	.....	.....	.....	.....	.....	.....	.....	10,000 00
Total	21,676,660 00	16,014,320 00	13,304,196 00	9,578,820 00	8,556,500 00	7,862,560 00	7,402,060 00	8,087,920 00
PENSIONS								
European War	30,530,359 38	33,256 800 00	33,050,000 00	32,990,000 00	35,000,000 00	36,500,000 00	38,600 000,00	39,000,000 00
Fenian Raid	1,000 00	1,000 00	1,000 00	750 00	750 00	.....	.....	.....
North West Rebellion	30,000 00	42,700 00	40,000 00	45,000 00	40,000 00	36,000 00	40,000 00	35,000 00
Militia Pensions Act 1901 (Statute)	400,000 00	500,000 00	600,000 00	650,000 00	700,000 00	700,000 00	800,000 00	850,000 00
Civil Flying	.....	.....	10,000 00	5,000 00	5,000 00	5,000 00	5,000 00	5,000 00
Salaries and Contingencies	*625,000 00	.....	.....	.....	.....	.....	.....	.....
Total	31,586,359 38	33,800,500 00	33,701,000 00	33,690,750 00	35,745,750 00	37,241,000 00	39,445,000 00	39,890,000 00
Grand Total	53,263,019 38	49,814,820 00	47,005,196 00	43,269 570 00	44,302,250 00	45,103 560 00	46,847 060 00	47,977 920 00

*Commencing 1922-23, the Salaries and Expenses of the Pension Board Staff are included in Soldiers' Civil Re-Establishment Votes.

WORKMEN'S COMPENSATION

Number of claims and amounts paid to Workmen's Compensation Boards and to Employers in respect of pensioners of 25 per cent and upwards continues to increase as the value of this legislation is more widely understood.

PAID IN 1927-28

Province	Number	Amount
		$ cts.
Quebec	5	2,552 19
Nova Scotia		
Ontario	102	22,231 24
Manitoba	109	38,087 06
Saskatchewan	5	936 95
Alberta	25	6,148 26
British Columbia	1	12 86
	247	69,968 56

STAFF

STATEMENT SHOWING TOTAL STAFF OF THE DEPARTMENT AS AT MARCH 31, 1927, AND MARCH 31, 1928

—	1927	1928
Head Office, Ottawa	410	422
B District, Nova Scotia, New Brunswick and Prince Edward Island	150	147
A District, Quebec	262	247
C District, Eastern Ontario	53	50
D District, Central Ontario	447	459
F District, Western Ontario	265	259
G District, Manitoba	95	96
H District, Saskatchewan	42	43
I District, Alberta	77	76
J District, British Columbia	161	160
M District, Overseas Office	12	10
Total	1,974	1,969
		(Decrease) 5

WAR SERVICE CLASSIFICATION OF STAFF AS AT DECEMBER 31, 1929, 1922, 1924, AND MARCH 31, 1926, 1927, 1928

—	1920	1922	1924	1926	1927	1928	Percentage
Service in France	2,959	2,105	1,495	1,327	1,225	*1,219	61·9
Service in England	552	321	206	183	165	†167	8·5
Service in Canada	239	146	83	75	82	‡80	4·0
Rejected or Exempted	61	31	23	19	14	13	0·6
Over and under age	238	128	64	41	24	23	1·1
Civilians—Male	95	26	15	7	15	10	0·6
Civilians—Female	1,635	1,066	638	505	449	**457	23·2
Total	5,779	3,823	2,524	2,157	1,974	1,969	100·0

*Includes 123 Nursing Sisters. †Includes 29 Nursing Sisters. ‡Includes 5 Nursing Sisters. ** Includes 13 Nursing Sisters.

STATEMENT SHOWING DISTRIBUTION OF MALE STAFF BY WAR SERVICE CLASSIFICATION AS AT MARCH 31, 1928

—	Number	Percentage
Service in France	1,096	80·9
Service in England	138	10·2
Service in Canada	75	5·5
Rejected or Exempted from Military Service	13	0·9
Boys and Men under and over Military Age	23	1·7
Civilians, Male	10	0·8
Total	1,355	100·0

Male staff with War Service 1,309
Male staff with no War Service 46
Of the Male Staff 96·6 per cent are returned Soldiers.

DISABLEMENT FUND STATEMENT

E. H. SCAMMELL, *Trustee*

The following statement of loans, advances and repayments made during the period April 1, 1927 to March, 1928, indicates the activity of the fund:—

Cash on hand, 31-3-27	$ 6,907 38	
Sundry advances outstanding, 31-3-27	43,828 22	
Total advances made, 5,781	202,052 17	
Refunds received		$ 191,529 20
Donations made		5,436 24
Bad debts written off		481 42
Administration expense		261 03
Sundry loans outstanding		49,349 56
Cash on hand, 31-3-28		5,730 32
	252,787 77	$ 252,787 77

DISABLEMENT FUND STATEMENT AS AT MARCH 31, 1928

Subscriptions			$ 93,710 20
Interest on same			63,298 23
Securities held at cost—			
Face value $79,000		$ 69,453 54	
Loans outstanding—			
Head Office	$ 37,966 31		
Districts	11,383 25		
		49,349 56	
Donations—			
Current period	5,436 24		
Previously made	15,692 60		
		21,128 84	
Bad Debts Written off—			
Current period	481 42		
Previous years	9,889 59		
		10,371 01	
Administration expense—			
Current period	261 03		
Previously expended	714 13		
		975 16	
Cash on hand—			
Districts	5,512 94		
Head Office	217 38		
		5,730 32	
		$ 157,008 43	$ 157,008 43

APPENDIX I

REGULATIONS OF THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

Under Order in Council P.C. 1842, Dated October 18, 1928

1. Definitions:

(*a*) *A disability attributable to service,* includes a disability aggravated on or by service and means a disability in respect of which pension has been awarded or conceded by the commission. Disability Attributable to Service.

(*b*) *Child* means a child of a former member of the forces within the meaning of the Pension Act, or in the discretion of the department, any person in regard to whom he stands in loco parentis. Child.

(*c*) *Commission* means the Board of Pension Commissioners for Canada. Commission.

(*d*) *Compensation,* unless otherwise qualified, means in respect of medical treatment, the compensation set forth in clause 3 hereof, and in respect of vocational training, the compensation set forth in clause 6 hereof. It also means "pay and allowances" referred to in the Pension Act. Compensation.

(*e*) *Department* means the Department of Pensions and National Health. Department.

(*f*) *Dependents* means only such persons as are classed as dependents under the Pension Act, or such other persons as the department may recognize as such. Dependents.

(*g*) *Former member of the forces* means any person who has served in any of the naval or military forces of Canada during the late war; Former member of the forces.

(*h*) *Maintenance* means the cost to the department for the provision of medical treatment, care and subsistence in a hospital or other institution operated by the department or the cost to the department of these services in a hospital or other institution not operated by the department but in regard to which the department has entered into an agreement for the provision of the same, or such lesser amount as the department may determine in individual cases. Maintenance.

(*i*) *Medical* authority means the opinion of a medical practitioner acting on behalf of the department, subject to the concurrence of the Director of Medical Services or supervising medical officers appointed by him. Medical authority.

(*j*) *Member or former member of the permanent forces* means any person who is serving or has served in any military or naval or air force of Canada. Permanent Force.

(*k*) *Military service, service or served,* unless the term is qualified, means and includes service in any of the naval or military forces of Canada during the late war. Military service.

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Out-patient 2.

(*m*) *Out-patient 2* means a former member of the forces who requires out-patient treatment for a disability attributable to service, which treatment does not prevent him from following his usual trade or occupation.

Pension.

(*n*) *Pension,* except where otherwise specifically stated herein, means a pension awarded by the Government of Canada on account of a disability attributable to service in the late war, and includes addition to pension and temporary pension, but does not include long service or other service pension, or pension awarded in respect of a decoration.

Pensioner.

(*o*) *Pensioner,* except where otherwise specifically stated herein, means a person who is or was in receipt of a pension as herein defined awarded under the Pension Act.

Pre-war Resident.

(*p*) *Pre-war resident* means a former member of the Imperial, Dominion (other than Canada) allied or associated forces who was domiciled in Canada prior to the 4th August, 1914.

Masculine and Feminine.

(*q*) Terms indicating the masculine gender apply also to the feminine gender.

The late war.

(*r*) *The late war* means the war which commenced on the 4th day of August, 1914, and was officially concluded on the 31st day of August, 1921.

Treatment.

(*s*) *Treatment* includes medical and surgical treatment and also includes dental services and the provision of prosthetic appliances.

Treatment—Pensions eligible for.

CLAUSE 2. (1) The department may give treatment to, or may admit to hospital for the purpose of observation, any former member of the forces who is suffering from a disability attributable to service, if treatment or observation is required for such disability, and, during treatment or observation, he shall be paid compensation.

Treatment—Persons not eligible for.

(2) Except as provided in the succeeding paragraphs of this clause, the department shall not, under the authority of this Order in Council, give treatment with compensation to any former member of the forces for a disability in respect of which the commission or the Federal Appeal Board has ruled that it was not attributable to service.

Classification of persons undergoing treatment.

(3) Persons undergoing treatment by the department shall be divided into the following classes, and shall be subject to the conditions set forth in this clause:—

Class 1.

Class 1. Persons in this class shall be paid compensation;

Pensioner requiring treatment for a disability attributable to service;

Pensioner requiring observation in connection with pension examination or pensioner or non-pensioner requiring observation to determine whether a disability which has not been accepted by the commission is attributable to service;

Pensioner or non-pensioner requiring observation for assessment of pension, following a ruling by the Federal Appeal Board;

Pensioner requiring observation to determine whether treatment is required for a disability attributable to service;

Pensioner who is found while undergoing examination or treatment for a disability attributable to service to be suffering from a disability not attributable to service which directly and adversely affects

the nature of the treatment provided for the former or to retard recovery from the same.

Class 2. Pensioner requiring hospitalization in respect of a non-pensionable disability—Treatment only may be granted without compensation or allowances except those benefits furnished to treatment only cases, if pensioner is unable to provide the same at his own expense, subject to the following conditions:— Class 2.

(i) That treatment shall be granted only in a hospital operated by the department or with which the department has a contract, if accommodation is available;

(ii) That the cost of conveying the pensioner to the hospital and from the hospital to his home shall not be a charge on the department, except in very extreme and special cases in which the department may defray the same;

(iii) That the granting of treatment shall not entitle the pensioner to pension in respect of the disability for which treatment is granted:

(iv) That should the pensioner, as an adjunct to his treatment, require a prosthetic appliance, or the adjustment of a prosthetic appliance, by reason of an injury or disease, except dental disease, sustained in civilian life, the department may furnish or adjust the same, but subsequent repairs or renewals shall not, except in special cases when no other means of providing the same are available, be a charge on the department;

(v) That treatment in this class shall not be granted (*a*) to any pensioner entitled to workmen's compensation or to corporation medical attendance in respect of the disability for which treatment is required; (*b*) to any pensioner who should be a charge upon his municipality or province by reason of his suffering from tuberculosis or infectious diseases including venereal disease contracted since the war; (*c*) to any pensioner who should be a charge upon his municipality or province by reason of his suffering from insanity or any mental disease requiring custodial care, unless he, at the time the application for treatment is made, is in receipt of payment of pension for a disability other than mental, or unless he, while receiving treatment from the department for a disability attributable to service other than mental, is found to be suffering from a mental disease not attributable to service; (*d*) to any pensioner who is a seaman and is entitled to treatment in a marine hospital; or (*e*) to any pensioner who requires dental treatment only.

Class 3. Pensioner or non-pensioner requiring treatment for a sequelae of venereal disease aggravated during service or contracted on service. Class 3.

(i) If pension is payable under section 12 of the Pension Act, in-patient treatment with compensation may be granted.

(ii) If no pension under section 12 of the Pension Act is payable, and the former member of the forces requires in-patient treatment, the department may grant treatment only.

(iii) If in-patient treatment is not necessary, and a pensioner or non-pensioner is residing at a distance from a provincial G.U. clinic, and cannot avail himself, therefore, of the facili-

ties provided at such clinic, the department may authorize out-patient 2 treatment by a departmental medical representative.

Class 4.

Class 4. Veteran's care cases.

(i) The term "pensioner" as used in this class means, in addition to the meaning set forth in definition (*o*), a person who was resident or domiciled in Canada on the fourth day of August, 1914, and who is or was in receipt of a pension payable under the Pension Law of the United Kingdom, or of any of His Majesty's Dominions (other than the Dominion of Canada), or of any of His Majesty's Allies or Associated Powers in the Great War, in respect of a disability resulting from injury or disease or an aggravation thereof attributable to or incurred or aggravated during service in the Great War.

(ii) The department may, at its discretion, provide quarters and maintenance and, when necessary, medical treatment in a departmental institution for any pensioner whose disability prevents him permanently from obtaining or continuing remunerative work and thereby earning sufficient to maintain himself, and who, as a result of these conditions, has or will become a public charge.

(iii) On the admission of a pensioner to a departmental institution, partial cost of his maintenance up to forty dollars ($40) per month may, at the discretion of the department and by arrangement with the pensioner and his dependents, be paid to the department from pension or any other moneys or income to which the pensioner may be entitled, provided that such payment shall not be made from pension payable to or in respect of his dependents; Of the sum so paid $3 per month, payable on the 15th and the last day of the month, may be repaid to the pensioner in order to provide comforts, etc., and seven dollars ($7) per month shall be credited to him on the books of the department for the provision of such clothing as he may require.

(iv) If no payment is made to the department towards the partial cost of maintenance of a pensioner, due to circumstances approved by the department, or if the payment made to department is less than ten dollars ($10) per month, the department may pay to the pensioner the sum of $3 per month payable on the 15th and the last day of the month in order to provide comforts, etc., and may furnish or purchase clothing as he may require, provided that the cost to the department for such clothing shall not exceed seven dollars ($7) per month.

Class 5.

Class 5. Non-pensioner admitted to hospital for examination or treatment and found not to be eligible for treatment by reason of the fact that his disability is not attributable to service but whose condition will not permit his immediate discharge from hospital; treatment only may be granted until discharge from hospital is possible.

Class 6.

Class 6. Pensioner who has been sentenced to imprisonment for six months or more and who, during the period of his imprisonment, requires treatment for a disability attributable to service may be

admitted to hospital at the request of the prison authorities but no compensation or allowances shall be granted.

Class 7. Members of Permanent Force, Naval Service, Air Force or Non-permanent Active Militia. Treatment may be furnished by the department as follows:— Class 7.

(i) If treatment is required for a disability attributable to service in the late war, treatment will be at the expense of the department. No compensation or allowances will be issued to or in respect of the patient, but pension, if any, will be continued.

(ii) If treatment is required for a disability not attributable to service in the late war, treatment will be at the expense of the Department of National Defence. No compensation or allowances will be issued to or in respect of the patient, but pension, if any, will be continued.

Class 8. Persons described in Orders in Council P.C. 848 dated the 29th May, 1925, P.C. 2187 dated the 20th October, 1922, and P.C. 1165 dated the 15th June, 1927, and any future amendments thereto. Treatment may be provided by the department and allowances issued in accordance with the authority set forth in these orders in council. Class 8.

Class 9. Royal Canadian Mounted Police. The department may grant treatment, without compensation or allowances, to members of the R.C.M.P. at the request and expense of the R.C.M.P. authorities. Class 9.

Class 10. Northwest Rebellion pensioners. The department may grant treatment with compensation to any person who served in the Northwest Rebellion who is in receipt of a pension for a disability resulting from such service and who may be in need of medical treatment for such disability. Class 10.

Class 11. Staff of the department who suffer injuries or contract communicable disease while employed. Class 11.

(i) An employee of the department also a vetcraft operative and, at the discretion of the department, a former member of the forces who is undergoing training, who is injured in the performance of his duty and who is entitled under the law of the province in which the accident occurred to compensation including treatment, may be admitted to treatment under the department, without compensation or allowances.

(ii) A non-permanent member of the staff employed in a hospital operated by the department who contracts a communicable disease while in attendance on patients suffering from such disease as a direct result of exposure while on such duty in hospital may be granted treatment with salary for such period as may be deemed necessary by the department.

(iii) A permanent member of the staff employed in a hospital operated by the department who contracts a communicable disease while in attendance on patients suffering from such disease as a direct result of exposure while on such duty in hospital may be granted treatment and such allowances or salary as are provided under Civil Service Regulations.

Class 12.

Class 12. Workmen's Compensation Cases. A pensioner or a former member of the Imperial Forces who is in receipt of a pension of 25 per cent or upwards who sustains an accident or suffers from a disease contracted while employed in an industry may, if the department is liable to reimburse a Workmen's Compensation Board or an employer for the cost of treatment, be granted treatment by the department without compensation or allowances.

Mental Cases.

(4) (i) Former members of the forces suffering from a mental disability necessitating treatment in a psychiatric hospital shall, in addition to the classification set forth herein, be classified as follows:—

"A" If mental disability attributable to or aggravated during service;

"C" If mental disability not attributable to service and the former member of the forces has no other pensionable disability;

"D" If the former member of the forces is a pensioner in respect of another disability and requires treatment for a mental disability not attributable to service.

(ii) If a legal guardian or curator has been appointed under the authority of a court with proper jurisdiction, or an administrator, appointed by the commission under the authority of the Pension Act, to administer the affairs and assume responsibility for the person of a former member of the forces suffering from a mental disability, he may, at the discretion of the department, be discharged from hospital and transferred to the care of such guardian, curator, or administrator, provided that the department shall not pay over any balance standing to the credit of the former member of the forces unless it is considered to be in the interests of the former member of the forces that this be done. The department may at its discretion require any guardian, curator or administrator to furnish a bond in an adequate amount.

Transfer from one Class to another.

(5) (i) The department may transfer a former member of the forces who is receiving treatment only in any of the classes in which the same has been authorized to Class 4 (Veterans Care) and if the said former member of the forces refuses such transfer the department may discharge him from treatment strength.

(ii) The department shall transfer any person who is receiving treatment only in any of the classes in which the same has been authorized to Class 1 if it is conceded by the commission that the disability for which he is receiving or has received treatment only is attributable to service.

(iii) The department may transfer any person who is receiving treatment in Class 1 to such other class as may be deemed necessary if it is found that the disability from which he is suffering and for which he requires further treatment is not attributable to service.

Patients to perform duties.

(6) A former member of the forces, who is an inmate of an institution at the expense of the department, who is receiving the benefits set forth in this clause, shall perform such duties as may be allotted to him by the department, provided that if such duties are of a supervisory character and such former member of the forces is

not in receipt of compensation, the department may, at its discretion, pay to him an additional allowance to that authorized for treatment only, veterans' care and Class D mental cases.

(7) (i) If on examination for pension of a former member of the forces it is found that a disability attributable to service is directly affected by the condition of his teeth and dental attention is required to reduce such disability or to prevent its increase, treatment may be given in accordance with departmental regulations. Dental Treatment.

(ii) A pensioner may be granted emergent dental relief in accordance with departmental regulations.

(8) Should the commission decide that a disability in respect of which a former member of the forces has obtained treatment, other than through the department, is attributable to service, the department may reimburse him or the organization or authority, under or through which he has obtained such treatment, such portion of the expenses incurred as may be in accordance with the regulations of the department, provided that such reimbursement shall not cover a period prior to the effective date from which pension is awarded for the said disability or subsequent to the commencement of payment of pension. Treatment obtained privately.

CLAUSE 3. (1) The compensation set forth in the schedule hereto attached and marked "A" (hereinafter referred to in this clause as the compensation) shall, subject to the conditions set forth in this clause, be payable monthly in arrears to or in respect of a former member of the forces while he is undergoing treatment for a disability attributable to service which prevents him from obtaining or continuing employment. Treatment Compensation.

(2) The compensation includes clothing allowances. Clothing Allowances.

(3) The compensation is payable in respect of the rank or acting rank held by the former member of the forces in respect of which he was in receipt of pay and allowances at the time of his retirement or discharge from military service or the rank at which he is pensioned, whichever is the higher. Acting Rank.

(4) In the cases of medical and dental officers where the pay of rank under the Department of National Defence would be $1 per day in excess of the compensation it shall be increased by $1 per day. Medical and Dental Officers.

(5) The compensation shall be payable in the following manner:— Manner compensation payable.

(i) Single man in hospital: $20 per month, the balance to be held by the department until the completion of treatment.

(ii) Men at home—the full compensation authorized.

(iii) Married men in hospital or men in hospital with dependents in respect of whom compensation is payable: to man, $20 per month; to wife or dependent, the dependent's compensation authorized.

(6) If a widower has children and it is necessary, in order to keep the family together, for him to employ a person for full time to care for them, he may, at the discretion of the department, be paid as a married man with children. Compensation for Widowers.

Men with Dependents.

(7) Man with dependent or dependents as referred to in Schedule "A" means (*a*) a widower with a child or children or a dependent parent or parents and/or with a dependent brother or sister or dependent brothers or sisters, (*b*) a single man with a dependent parent or parents and/or with a dependent brother or sister or dependent brothers or sisters.

Children in excess of six.

(8) When there are more than six children or dependents the dependents' compensation shall be increased by $10 per month in respect of each child or dependent in excess of six.

Dependent parents,etc.

(9) If a married man is supporting a parent or parents, or a brother or brothers, or a sister or sisters, any such additional dependent may, for the purpose of receiving compensation be regarded as a child.

Man and wife undergoing treatment.

(10) When a man and wife, both former members of the forces, are undergoing treatment at the same time, the compensation payable shall be as to two single former members of the forces in accordance with the rank of each. In cases where there are children or other dependents, if the compensation payable to a married man with children or other dependents, based on the rank of the man, would be in excess of that payable in respect of two single former members of the forces, in accordance with the rank of each, it shall be substituted therefor, but if it would be less, no extra compensation in respect of children or other dependents shall be payable.

Man living with woman not his wife.

(11) The department may, at its discretion, pay the compensation provided for a wife to a woman with whom a pensioner is living as his wife if the circumstances are such as to warrant such payment.

Wear and tear allowance.

(12) When a pensioner commences or has received treatment with compensation or allowances under the authority of this Order in Council or of any previous Order in Council, if he is or was entitled to a pension allowance for wear and tear of clothing his compensation shall be increased accordingly.

Allowances during Treatment only.

(13) In any case in which treatment only is authorized, except a class "D" mental case, an allowance of $3 per month, payable on the 15th and the last day of the month may be made for the provision of comforts, and clothing may be furnished when necessary up to a value not exceeding $7 per month, provided that if the former member of the forces is in receipt of a pension of $10 per month or over no allowances for clothing or comforts shall be issued, provided also that if the pension is less than $10 per month the department may provide clothing, if required, to a value equal to the difference between the pension paid and $10 per month.

Class "D" Mental Cases.

(14) In any Class "D" mental case the following shall be the procedure:—

Subject to the discretion of the commission there may be paid to the department towards the cost of maintenance and the provision of comforts and clothing from the pension payable to him, a sum not exceeding $40 per month, provided

(*a*) that the difference between the compensation which would otherwise be payable if the disability were attributable to service and the pension prior to the reduction of the latter

under the provisions of section 29 (2) of the Pension Act shall be considered as a payment towards the said cost of maintenance;

(b) that if the sum paid to the department is $10 per month or over there shall be repaid to him $3 per month for comforts and there shall be credited to him on the books of the department $7 per month for the provision only of such clothing as he may require while undergoing treatment; or if the sum paid to the department is less than $10 per month no amount shall be credited to the pensioner for clothing, but he shall be paid $3 per month for comforts and shall be furnished with such clothing as in the opinion of the department he may require, to a value equal to the difference between the pension paid and $10 per month.

Class "C" Mental Cases.

(15) When a former member of the forces who has been undergoing treatment for a mental disability as a Class "C" case has sufficiently recovered to be allowed temporarily to pass under his own control, or that of his friends, there may be paid, at the discretion of the department, an allowance at the rate of $1 per day for a period not exceeding three months.

Credit Balances.

(16) Any credit balance held by the department on account of a former member of the forces, during treatment or subsequent to discharge therefrom, shall be administered by the department on his behalf; provided that any unpaid balance representing compensation payable by the department due at the time of the death of the former member of the forces shall not be deemed to form part of the assets of his estate but if he has dependents or obligations within the meaning of the Pension Act or of this Order in Council, such balance may be paid by the department to such dependents or applied against such obligations.

Compensation for mental cases.

(17) Notwithstanding the restrictions contained in any previous Order in Council the department shall credit the accounts of former members of the forces, who are undergoing or who have undergone treatment for a mental disease and who have been classified "A" or "B", with the compensation authorized for non-mental cases in accordance with the rates in force at the time treatment is or was given, provided that compensation prior to the first September, 1920, shall be in accordance with the rates then in force for mental cases.

Interest on Credit Balances.

(18) The department may pay interest at the rate of three per cent per annum on the amounts of allowances or other moneys withheld under the provisions of this Order in Council or any other enabling authority, from former members of the forces or pre-war residents of Canada who have been on the strength of the department for treatment for a period of three months or longer and may pay a similar rate of interest on any moneys belonging to former members of the forces, which, in the interests of such former members of the forces, it is deemed advisable to receive and hold, such interest to be credited on all open accounts of such former members of the forces or pre-war residents of Canada as at the date of completion of treatment or death, provided that no interest shall be payable by the department on moneys which are withheld owing to failure on the part of a former member of the forces of a pre-war resident of Canada to claim the amount due or to furnish the department with his proper address or the proper address of his dependents, or owing to the disturbed condition of the country in which his dependents reside.

Unreasonable refusal or misconduct.

CLAUSE 4. If a former member of the forces should in the opinion of the department undergo medical or surgical treatment and he unreasonably refuses to undergo the same or if by reason of misconduct while undergoing treatment it is necessary to discontinue the same, his compensation may be reduced and he may be discharged from hospital at the discretion of the department.

Training of Disabled Men.

CLAUSE 5. (1) The department may grant vocational training to any former member of the forces who, in the opinion of medical authority, is suffering from a disability attributable to service, in accordance with its regulations, and, during training, may pay the compensation set forth in Clause 6 hereof, provided (*a*) that in the opinion of the department the pensionable disability of the former member of the forces has increased to an extent which prevents him from following his principal pre-war occupation, or his principal post-war occupation, or the occupation for which he was previously granted training by the department, or (*b*) that the pensionable disability of the former member of the forces has not increased but no previous training has been granted and in the opinion of the department he has made an effort to follow his pre-war occupation but is now unable to do so.

(2) The department, notwithstanding the authority contained in paragraph (1) of this clause, shall have discretion to refuse vocational training, even though the above conditions apply, when in its opinion training would not result in reasonable re-establishment of the former member of the forces owing to his advanced age or for any other reason.

Training Compensation.

CLAUSE 6. (1) The compensation payable to or in respect of a former member of the forces while he is undergoing training by the department shall, subject to the conditions set forth in this clause, be as follows, and shall be paid monthly in arrears:—

Amount payable	Payable to man	Payable to wife	Payable to or in respect of dependents	Total
	$	$	$	$
(*a*) Single man without dependents	75	.....	.....	75
(*b*) Man with wife and no other dependents	50	50	.....	100
" " 1 child	50	65	.....	115
" " 2 children	50	77	.....	127
" " 3 children	50	87	.....	137
(*c*) Widower with 1 child	75	.....	20	95
" " 2 children	75	.....	30	105
" " 3 children	75	.....	40	115
(*d*) Man without wife or children but with parent or parents or brother or sister or brothers or sisters wholly or mainly dependent on him,				
with one parent only	75	.....	25	100
" " and 1 brother or sister	75	.....	40	115
" " and 2 brothers or sisters	75	.....	52	127
" " and 3 brothers and sisters	75	.....	62	137
with two parents and no brother or sister	75	.....	40	115
" " and 1 brother or sister	75	.....	52	127
" " and 2 brothers or sisters	75	.....	62	137
" " and 3 brothers and sisters	75	.....	72	147
with 1 orphan brother or sister	75	.....	20	95
with 2 " "	75	.....	30	105
with 3 " "	75	.....	40	115
(*e*) Man without wife or children but with a person or persons partially dependent on him	75	.....	25	100

(2) For children or brothers or sisters in excess of three, $10 each per month shall be payable.

Additional allowance when living away from or having to move dependents.

(3) In cases where a former member of the forces who, while undergoing training, is not subsisted by the department, and who has a dependent or dependents, to or in respect of whom compensation is payable under this Order in Council, with whom he was residing at the commencement of his training, is, owing to his undergoing training, unable to continue to reside with such dependent or dependents, or finds it necessary, with the approval of the department, to remove such dependent or dependents to another place in order to continue to reside with them, the compensation payable to such former member of the forces shall be increased by an amount of $8 per month, and the compensation payable to or on account of such dependent or dependents shall also be increased by an amount of $8 per month.

Pension during training.

(4) If a former member of the forces who is undergoing training by the department is a pensioner, any payments or pension covering the period of training, whether in respect of himself or his dependents, shall be deducted from the compensation set forth in this clause.

Compensation includes car fares and meals.

(5) The compensation set forth in this clause shall include expenses of transportation to and from places of training and meals except as provided in clause 13 hereof.

Payment of compensation for one month after completing training.

(6) The payment of compensation authorized by this clause shall be continued for one month after completion of training of a former member of the forces, provided that

(i) in the opinion of the department his conduct while undergoing training has been satisfactory;

(ii) his training has occupied a longer period than two months; and

(iii) he has not already received this benefit on completion of a previous period of training.

Institutional treatment while undergoing training.

CLAUSE 7. If a former member of the forces who is undergoing training by the department requires institutional treatment during the period of his training, his training compensation and the compensation of his dependent or dependents may be continued during the period of such institutional treatment, provided (*a*) that the payment of such compensation during the period of such treatment shall be suspended if the treatment is made necessary by misconduct, (*b*) that if the disability is attributable to service the former member of the forces may at at any time be transferred from training compensation to treatment compensation at the discretion of the department, and (*c*) that if the said treatment is required for a disability not attributable to service, the continuation of compensation shall be at the discretion of the department up to a limit of one month.

Training in an industry.

CLAUSE 8. When a former member of the forces has been found eligible for training, the department shall, at its discretion, where it is considered desirable in the interests of the trainee so to do, and as far as the same may be practicable, place him for training in an industry under an agreement with the employer as to wages on an

ascending scale, and the department shall pay the difference between the wages or other remuneration received by him in such industry and the compensation set forth in Clause 6 hereof.

Probational training—Problem Employment Cases.

CLAUSE 9. Disabled former members of the forces, also disabled former members of the Imperial Forces who were pre-war residents of Canada, who are ineligible for training under the provisions of Clause 5 hereof but who nevertheless have become industrial problem cases through their inability to secure or hold steady employment, may be granted probational training to fit them for permanent employment along specific lines with an industry or firm and during such probational training may be remunerated in the following manner:—

Pension payable by the commission or other authority and any payment of wages or salary by the trainors may be augmented to the following rates:—

	Per Month
Single man	$50 00
Married man without children	65 00
Married man with one child	77 00
Married man with two or more children	87 00

Vocational Loans to Trainees.

CLAUSE 10. (1) The department, at its discretion, may advance by way of loan to any former member of the forces who has received training on account of a disability attributable to service and who is in need of the same, a sum not exceeding $500 for the purchase of tools and equipment necessary to establish him in his new occupation, such loan to be repayable within five years from date of issue without interest.

Discharges Chattel Mortgages.

(2) Authority is hereby granted to the Minister of Pensions and National Health and/or the Deputy Minister of Pensions and National Health to sign discharges or releases of chattel mortgages taken in favour of His Majesty by way of security for such loans.

Accidents to Trainees and Vetcraft Operatives.

CLAUSE 11. Former members of the forces undergoing training by the department and vetcraft operatives shall, while in receipt of compensation or wages from the department, be considered employees thereof and, in case of injury, shall be entitled to the full benefits of workmen's compensation provided by the Government Employees' Compensation Act (Revised Statutes of Canada 1927, chapter 30), provided that the department shall be authorized to carry out such investigations as may be necessary to safeguard the interests of the Government in this regard; any workmen's compensation awarded may be paid by the department or by the Department of Finance.

Age limit of Children.

CLAUSE 12. No compensation or allowances shall be paid under the authority of this Order in Council for any child or brother or sister of any former member of the forces, who, if a boy, is over the age of 16, or, if a girl, is over the age of 17 years, provided that if the Commission has awarded or continued pension in respect of any such child or brother or sister beyond the age limit payment of compensation may be continued for so long as the ruling of the commission is operative, provided also that no allowances shall be paid in respect of a child or brother or sister after the marriage of such child or brother or sister.

CLAUSE 13. (1) The following allowances may be granted to a former member of the forces directed by the department or the commission to report at any place, to cover travelling by the most direct route to and from his place of residence, subsistence and other out-of-pocket expenses while travelling or while detained at the place where directed to report, and, if not in receipt of treatment or training compensation from the department, loss of wages while necessarily absent from his regular occupation:— Travelling and Subsistence Allowances.

(i) Return railway transportation, first-class, with sleeping berth if necessary, and/or reasonable charges for other modes of transportation when necessary and if supported by proper vouchers;

(ii) Meals, in transit, if not provided by transportation company, at $1 each;

(iii) If not undergoing treatment or training, board and quarters during the time detained, which shall wherever possible be furnished at a departmental institution, but if such cannot be furnished by the department, the following rates shall apply during the time he is detained: meals each, 50 cents; lodging, $2 per night.

(iv) Reimbursement for loss of wages, on production of a certificate from his employer stating rate of pay which he will lose or has lost on account of absence from work up to but not exceeding $3 per day. If the former member of the forces is his own employer he may furnish the certificate himself but shall not be paid any allowance for loss of wages unless the department is satisfied that he has sustained the loss for which claim is made. If he is admitted to hospital for observation or treatment he shall not be paid any allowance for loss of wages on the day of admission or discharge or during his stay in hospital. Reimbursement for loss of wages.

(2) A former member of the forces who reports for examination or treatment, or the repair of a prosthetic appliance without having been directed to report shall not be granted the allowances set forth in this clause unless and until it is determined that Reporting without direction.

(i) in the case of a pensioner the examination results in an increase of pension for his recognized pensionable disability or the award of a further pension in respect of a disability not previously recognized, or in hospitalization for a disability attributable to service;

(ii) in the case of a former member of the forces who is not a pensioner the examination results in an award of pension or hospitalization;

(iii) in the case of a former member of the forces who reports for the repair of a prosthetic appliance he would have been directed to report had he made proper application;

when he may at the discretion of the department or the commission be granted the said allowances provided that should he report to an office of the department outside of the district to which he would have been directed to report had he made proper application he shall not be paid an amount in excess of that which would have been paid had he reported under direction.

Travelling allowances outside of Canada.

(3) The allowances set forth in this clause shall be applicable in Canada only unless otherwise determined by the department. When a former member of the forces is not resident in Canada, he shall be paid such travelling and out-of-pocket expenses for the services covered by this clause as the department may at its discretion from time to time determine, provided that where possible the amount payable and the conditions of payment shall be those prevailing between the Government of the country in which the former member of the forces is residing and the former members of the forces of the said country.

Agreements with other Governments.

CLAUSE 14. The department may enter into agreements with the British Government or the Governments of any of His Majesty's Dominions, or the Governments of any of His Majesty's Allies or Associates in the late war for the following purposes:—

(*a*) The treatment or training of former members of the forces in any country outside of Canada;

(*b*) The treatment or training of former members of the Imperial, Dominion, Allied or Associated forces in Canada or in any country outside of Canada and in accordance with such agreements may, notwithstanding the regulations contained in the preceding clauses of this Order in Council, pay such compensation or allowances to former members of the forces or their dependents in countries outside of Canada as may be agreed upon with the Government of the country concerned, and may pay compensation or allowances to former members of the British, Dominion, Allied or Associated forces, or their dependents, subject to subsequent reimbursement by the Government concerned, and may render accounts for the cost of examinations, treatment or training to the Government concerned.

Psychiatric Hospitals.

CLAUSE 15. The department shall have authority to operate such hospitals for psychiatric treatment of persons suffering from mental diseases as may be deemed necessary and may make such arrangements with the provincial governments in regard to such hospitals as may be required and may also, when it is recognized by medical authority that the department is liable for maintenance, make arrangements with the provincial governments for the care and treatment of former members of the forces, who are not mentally responsible, in provincial institutions for the treatment of mental disease.

Purchase of Graves.

CLAUSE 16. The department may purchase from time to time single graves or blocks of graves in any cemetery for the burial of former members of the forces who may die while on the strength of the department for treatment or for whose burial the department is otherwise responsible.

Departmental and B.P.C. decisions final.

CLAUSE 17. In any matters which are left to the discretion of the department, the decision of the department shall be final, and in any matters which are left to the discretion of the commission the decision of the commission shall be final.

CLAUSE 18. The department shall have power to make regulations respecting the administration of benefits granted by this Order in Council and discipline of, and compensation or allowances payable to, a former member of the forces while undergoing treatment or training by the department, or while enjoying any other benefits granted by this Order in Council, and the compensation or allowances payable to or in respect of his dependent or dependents, and all deductions from or cancellations of his or their compensation or allowances for the purpose of discipline, or recovery of over-payments of compensation, allowances or pension, or for any other purpose, and to require that before becoming entitled to treatment or training by the department, or to any other benefits granted by this Order in Council, a former member of the forces shall sign a document agreeing to submit to all such regulations. Power to make regulations.

(Sgd.) E. J. LEMAIRE,
Clerk of the Privy Council.

SCHEDULE A—PAY AND ALLOWANCES FOR FORMER MEMBERS OF THE FORCES WHO ARE ON THE STRENGTH OF THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH FOR MEDICAL TREATMENT

—	All ranks below Sergeant (Mil.) and Petty Officers (Naval)			Sergeants (Military) Petty Officers and equivalent ratings (Naval)			Squadron Batt. or Coy. Q.M. Sergeant (Mil.)			Squad. Batt. Co. Sgt. Maj., Col. Sgt., Staff Sgt., Q.M. Sgt. (without Warrant) (Mil.)—Chief Petty Off. and equiv. ratings (Naval)			Q.M. Sergeant (W.O. Class 2) (Military)			Sgt. Maj. (without Warrant) Military Naval Cadet Midshipman (Naval)			Sgt. Maj. (Warrant Officer Class 1) (Military) Warrant Officer (Naval)		
	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
In-Patient																					
Single man	45 00	.....	45 00	52 50	.....	52 50	58 50	.....	58 50	62 00	.....	62 00	68 00	.....	68 00	69 50	.....	69 50	77 00	.....	77 00
Married man—Wife only	20 00	66 00	86 00	20 00	72 00	92 00	20 00	78 00	98 00	20 00	81 00	101 00	20 00	87 00	107 00	20 00	88 50	108 50	20 00	101 00	121 00
" " and 1 child	20 00	75 00	95 00	20 00	81 00	101 00	20 00	87 00	107 00	20 00	90 00	110 00	20 00	96 00	116 00	20 00	97 50	117 50	20 00	110 00	130 00
" " 2 children	20 00	84 00	104 00	20 00	88 00	108 00	20 00	94 00	114 00	20 00	97 00	117 00	20 00	103 00	123 00	20 00	104 50	124 50	20 00	117 00	137 00
" " 3 "	20 00	92 00	112 00	20 00	93 00	113 00	20 00	99 00	119 00	20 00	102 00	122 00	20 00	108 00	128 00	20 00	109 50	129 50	20 00	122 00	142 00
" " 4 "	20 00	100 00	120 00	20 00	100 00	120 00	20 00	104 00	124 00	20 00	107 00	127 00	20 00	113 00	133 00	20 00	114 50	134 50	20 00	127 00	147 00
" " 5 "	20 00	108 00	128 00	20 00	108 00	128 00	20 00	109 00	129 00	20 00	112 00	132 00	20 00	118 00	138 00	20 00	119 50	139 50	20 00	132 00	152 00
" " 6 "	20 00	117 00	137 00	20 00	117 00	137 00	20 00	117 00	137 00	20 00	117 00	137 00	20 00	122 00	142 00	20 00	123 50	143 50	20 00	136 00	156 00
Man with dependent or dependents—																					
" 1 dependent	20 00	55 00	75 00	20 00	61 00	81 00	20 00	67 00	87 00	20 00	70 00	90 00	20 00	76 00	96 00	20 00	77 50	97 50	20 00	90 00	110 00
" 2 dependents	20 00	64 00	84 00	20 00	68 00	88 00	20 00	74 00	94 00	20 00	77 00	97 00	20 00	83 00	103 00	20 00	84 50	104 50	20 00	97 00	117 00
" 3 "	20 00	72 00	92 00	20 00	73 00	93 00	20 00	79 00	99 00	20 00	82 00	102 00	20 00	88 00	108 00	20 00	89 50	109 50	20 00	102 00	122 00
" 4 "	20 00	80 00	100 00	20 00	80 00	100 00	20 00	84 00	104 00	20 00	87 00	107 00	20 00	93 00	113 00	20 00	94 50	114 50	20 00	107 00	127 00
" 5 "	20 00	88 00	108 00	20 00	88 00	108 00	20 00	89 00	109 00	20 00	92 00	112 00	20 00	98 00	118 00	20 00	99 50	119 50	20 00	112 00	132 00
" 6 "	20 00	97 00	117 00	20 00	97 00	117 00	20 00	97 00	117 00	20 00	97 00	117 00	20 00	102 00	122 00	20 00	103 50	123 50	20 00	116 00	136 00
Single man with 1 partial dependent	20 00	40 00	60 00	20 00	40 00	60 00	20 00	40 00	60 00	20 00	42 00	62 00	20 00	48 00	68 00	20 00	49 50	69 50	.....	.....	.....
" " 2 or more partial dependents	20 00	50 00	70 00	20 00	50 00	70 00	20 00	50 00	70 00	20 00	50 00	70 00	20 00	50 00	70 00	20 00	50 00	70 00	.....	.....	.....
Out-Patients—Class I																					
Single man	75 00	.....	75 00	77 00	.....	77 00	83 00	.....	83 00	86 00	.....	86 00	92 00	.....	92 00	93 50	.....	93 50	101 50	.....	101 50
Married man—Wife only	20 00	84 00	104 00	20 00	96 00	116 00	20 00	102 00	122 00	20 00	105 00	125 00	20 00	111 00	131 00	20 00	112 50	132 50	20 00	125 00	145 00
" " and 1 child	20 00	95 00	115 00	20 00	105 00	125 00	20 00	111 00	131 00	20 00	114 00	134 00	20 00	120 00	140 00	20 00	121 50	141 50	20 00	134 00	154 00
" " 2 children	20 00	107 00	127 00	20 00	112 00	132 00	20 00	118 00	138 00	20 00	121 00	141 00	20 00	127 00	147 00	20 00	128 50	148 50	20 00	141 00	161 00
" " 3 "	20 00	117 00	137 00	20 00	117 00	137 00	20 00	123 00	143 00	20 00	126 00	146 00	20 00	132 00	152 00	20 00	133 50	153 50	20 00	146 00	166 00
" " 4 "	20 00	127 00	147 00	20 00	127 00	147 00	20 00	128 00	148 00	20 00	131 00	151 00	20 00	137 00	157 00	20 00	138 50	158 50	20 00	151 00	171 00
" " 5 "	20 00	137 00	157 00	20 00	137 00	157 00	20 00	137 00	157 00	20 00	137 00	157 00	20 00	142 00	162 00	20 00	143 50	163 50	20 00	156 00	176 00
" " 6 "	20 00	147 00	167 00	20 00	147 00	167 00	20 00	147 00	167 00	20 00	147 00	167 00	20 00	147 00	167 00	20 00	147 00	167 00	20 00	160 00	180 00
Man with dependent or dependents—																					
" 1 dependent	38 00	55 00	93 00	42 50	60 50	103 00	44 00	67 00	111 00	44 00	70 00	114 00	44 00	76 00	120 00	44 00	77 50	121 50	44 00	90 00	134 00
" 2 dependents	39 50	61 50	104 00	42 50	67 50	110 00	44 00	74 00	118 00	44 00	77 00	121 00	44 00	83 00	127 00	44 00	84 50	128 50	44 00	97 00	141 00
" 3 "	42 50	72 50	115 00	44 00	73 00	117 00	44 00	79 00	123 00	44 00	82 00	126 00	44 00	88 00	132 00	44 00	89 50	133 50	44 00	102 00	146 00
" 4 "	45 50	79 50	125 00	45 50	81 50	127 00	45 50	82 50	128 00	45 50	85 50	131 00	45 50	91 50	137 00	45 50	93 00	138 50	45 50	105 50	151 00
" 5 "	47 00	88 00	135 00	47 00	90 00	137 00	47 00	90 00	137 00	47 00	90 00	137 00	47 00	95 00	142 00	47 00	96 50	143 50	47 00	109 00	156 00
" 6 "	48 50	96 50	145 00	48 50	98 50	147 00	48 50	98 50	147 00	48 50	98 50	147 00	48 50	98 50	147 00	48 50	98 50	147 00	48 50	111 50	160 00
Single man with 1 partial dependent	45 50	39 50	85 00	45 50	39 50	85 00	45 50	39 50	85 00	45 50	40 50	86 00	45 50	46 50	92 00	45 50	48 00	93 50	.....	.....	.....
" " 2 or more partial dependents	45 50	49 50	95 00	45 50	49 50	95 00	45 50	49 50	95 00	45 50	49 50	95 00	45 50	49 50	95 00	45 50	49 50	95 00	.....	.....	.....

	Lieut. (Military) Sub-Lieutenant (Naval)			Capt. (Military) Lieutenant (Naval)			Major (Military) Lieutenant-Commander (Naval)			Lieut.-Colonel (Mil) Commander, Captain under 3 years (Naval)			Colonel (Military) Captain over 3 years (Naval)			Brig.-Gen. (Comdg. Brigade) (Military) Commodore (Naval)			Maj. Gen. (Comdg. Division (Military) Rear Admiral (Naval)		
	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total	Payable to man	Payable to dependents	Total
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
In-Patient																					
Single man	97 00	.....	97 00	121 50	.....	121 50	152 00	.....	152 00	190 00	.....	190 00	228 00	.....	228 00	430 00	.....	430 00	670 00	.....	670 00
Married man—Wife only	20 00	117 00	137 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
" " and 1 child	20 00	117 00	137 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
" " 2 children	20 00	117 00	137 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
" " 3 "	20 00	122 00	142 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
" " 4 "	20 00	127 00	147 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
" " 5 "	20 00	132 00	152 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
" " 6 "	20 00	136 00	156 00	20 00	142 00	162 00	20 00	182 00	202 00	20 00	230 00	250 00	20 00	268 00	288 00	20 00	462 00	482 00	20 00	702 00	722 00
Man with dependent or dependents—																					
" 1 dependent	20 00	97 00	117 00	20 00	120 00	140 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 2 dependents	20 00	97 00	117 00	20 00	120 00	140 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 3 "	20 00	102 00	122 00	20 00	120 00	140 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 4 "	20 00	107 00	127 00	20 00	120 00	140 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 5 "	20 00	112 00	132 00	20 00	120 00	140 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 6 "	20 00	116 00	136 00	20 00	120 00	140 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Single man with 1 partial dependent	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" " 2 or more dependents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Out-Patients—Class I																					
Single man	143 00	.....	143 00	173 50	.....	173 50	204 00	.....	204 00	242 00	.....	242 00	280 00	.....	280 00	480 00	.....	480 00	720 00	.....	720 00
Married man—Wife only	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
" " and 1 child	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
" " 2 children	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
" " 3 "	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
" " 4 "	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
" " 5 "	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
" " 6 "	20 00	161 00	181 00	20 00	193 50	213 50	20 00	233 50	253 50	20 00	281 50	301 50	20 00	320 00	340 00	20 00	520 00	540 00	20 00	760 00	780 00
Man with dependent or dependents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 1 dependent	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 2 dependents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 3 "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 4 "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 5 "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" 6 "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Single man with 1 partial dependent	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" " 2 or more partial dependents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REGULATIONS OF THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH UNDER ORDER IN COUNCIL P.C. 1842, DATED OCTOBER 18, 1928

INDEX

Accidents to trainees and vetcraft operatives.. .. .. Clause 11
Acting rank.. .. .. Clause 3 (3)
Active Militia (Class 7).. .. .. Clause 2 (3)
Administrators of mental cases.. .. .. Clause 2 (4)
Age limit of children.. .. .. Clause 12
Agreements with other Governments.. .. .. Clause 14
Air Force.. .. .. Clause 1 (*j*)
Air Force (Class 7).. .. .. Clause 2 (3)
Allowances during treatment only.. .. .. Clause 3 (13)
" to trainees living away from or having to move dependents Clause 6 (3)
" while undergoing probational training.. .. .. Clause 9
Attributable to service—definition.. .. .. Clause 1 (*a*)

Board of Pension Commissioners for Canada—definition.. .. .. Clause 1 (*c*)

Car fares and meals during training.. .. .. Clause 6 (5)
Chattel mortgage discharges.. .. .. Clause 10 (2)
Child—definition.. .. .. Clause 1 (*b*)
Children—age limit.. .. .. Clause 12
Children—in excess of six.. .. .. Clause 3 (8)
Class "C" mental cases.. .. .. Clause 3 (15)
Class "D" mental cases.. .. .. Clause 3 (14)
Classification of persons undergoing treatment.. .. .. Clause 2 (3)
Class 1. Treatment with compensation.
Class 2. Treatment only. Treatment required for non-pensionable disability.
Class 3. Treatment for sequelae of venereal disease.
Class 4. Veterans' care.
Class 5. Non-pensioner who cannot be discharged from hospital.
Class 6. Prisoners.
Class 7. Permanent Force, Air Force, Naval Service, etc.
Class 8. P.C's. 848 and 2187.
Class 9. R.C.M.P.
Class 10. Northwest rebellion.
Class 11. Staff of Department who sustain injuries, etc. Vetcraft operatives and trainees.
Class 12. P.C. 558 cases.
Clothing Allowance.. .. .. Clause 3 (2)
Clothing Allowance—pension.. .. .. Clause 3 (12)
Commission—definition.. .. .. Clause 1 (*c*)
Common-law wife.. .. .. Clause 3 (11)
Compensation during treatment—.. .. .. Schedule A and Clause 3
" (Class 1).. .. .. Clause 2 (3)
" during training.. .. .. Clause 6
" for mental cases.. .. .. Clause 3 (17)
" for one month after completing training.. .. .. Clause 6 (6)
" for widowers.. .. .. Clause 3 (6)
" manner payable.. .. .. Clause 3 (5)
" to medical and Dental Officers.. .. .. Clause 3 (4)
" Pension Act—definition.. .. .. Clause 1 (*d*)
" unpaid at death.. .. .. Clause 3 (16)
Concurrent treatment of pensioner (Class 1).. .. .. Clause 2 (3)
Credit balances.. .. .. Clause 3 (16)
Credit balances—interest on.. .. .. Clause 3 (18)

Decisions final.. .. .. Clause 17
Definitions.. .. .. Clause 1
Definition—"Man with Dependents".. .. .. Clause 3 (7)
Dental treatment.. .. .. Clause 2 (7)
Dental treatment only—treatment only cases not eligible (Class 2) pars. (iv) and (v).. .. .. Clause 2
Department—definition.. .. .. Clause 1 (*e*)
Departmental staff (Class 11).. .. .. Clause 2 (3)
Dependents—definition.. .. .. Clause 1 (*f*)
" —"Man with"—definition.. .. .. Clause 3 (7)
" —parents, etc.. .. .. Clause 3 (9)
Disability attributable to service (Class 1).. .. .. Clause 2 (3)

Disability attributable to service—definition.. Clause 1 (*a*)
Discharges—Chattel mortgages.. Clause 10 (2)
Duties to be performed by patients.. Clause 2 (6)

Employees of department (Class 11).. Clause 2 (3)

Former member of the forces—definition.. Clause 1 (*g*)
Former members of Permanent Force (Class 8).. Clause 2 (3)
Former member of Permanent Force—definition.. Clause 1 (*j*)

Graves, purchase of.. Clause 16
Guardians or curators of mental cases.. Clause 2 (4)

Hospitals, psychiatric.. Clause 15
Husband and wife undergoing treatment.. Clause 3 (10)

Industry, training in.. Clause 8
Interest on credit balances.. Clause 3 (18)

Loss of wages.. Clause 13 (1) (iv)

Maintenance—definition.. Clause 1 (*h*)
Man and wife undergoing treatment.. Clause 3 (10)
Man with dependents—definition.. Clause 3 (7)
Masculine and feminine—definition.. Clause 1 (*q*)
Meals and car fares during training.. Clause 6 (5)
Medical authority—definition.. Clause 1 (*i*)
Medical classification.. Clause 2 (3)
Member of Permanent Force—definition.. Clause 1 (*j*)
Members of the Permanent Force, etc. (Class 7).. Clause 2 (3)
Mental cases, Class "C".. Clause 3 (15)
" " Class "D".. Clause 3 (14)
" " Compensation.. Clause 3 (17)
" " Special Classification.. Clause 2 (4)
Military service—definition.. Clause 1 (*k*)
Misconduct while undergoing treatment.. Clause 4

Naval Force.. Clause 1 (*j*)
Naval Service (Class 7).. Clause 2 (3)
Northwest Rebellion pensioners (Class 10).. Clause 2 (3)

Observation for assessment of pension (Class 1).. Clause 2 (3)
" in connection with Pension Examination (Class 1).. Clause 2 (3)
" *re* treatment of pensioner (Class 1).. Clause 2 (3)
" to determine whether disability attributable to service (Class 1).. Clause 2 (3)
Order in Council P.C. 848 (Class 8).. Clause 2 (3)
Order in Council P.C. 2187 (Class 8).. Clause 2 (3)
Out-patient 2—definition.. Clause 1 (*n*)

Patients to perform duties.. Clause 2 (6)
Pay and allowances.. Clause 1 (*d*)
Pension—definition.. Clause 1 (*n*)
Pension—during training.. Clause 6 (4)
Pensioner—definition.. Clause 1 (*o*)
" awarded compensation under P.C. 558 (Class 12).. Clause 2 (3)
" sentenced to imprisonment (Class 6).. Clause 2 (3)
Permanent Force, member of—definition.. Clause 1 (*j*)
Permanent Force (Class 7).. Clause 2 (3)
Power to make regulations.. Clause 18
Pre-war resident—definition.. Clause 1 (*p*)
Prisoner, treated by department (Class 6).. Clause 2 (3)
Probational training.. Clause 9
Problem employment cases.. Clause 9
Psychiatric hospitals.. Clause 15

Rank.. Clause 3 (3)
Refusal of treatment.. Clause 4
Regulations, power to make.. Clause 18
Reimbursement for loss of wages.. Clause 13 (1) (iv)
Reimbursement in respect of treatment obtained privately.. Clause 2 (8)
Reporting without direction.. Clause 13 (2)
Royal Canadian Mounted Police (Class 9).. Clause 2 (3)

Service or served—definition.. Clause 1 (*k*)
Staff of department (Class 11).. Clause 2 (3)

Training compensation.. .. .. Clause 6
" compensation for one month after completing course.. .. .. .. Clause 6 (6)
" in industry.. .. .. Clause 8
" of disabled.. .. .. Clause 5
" probational.. .. .. Clause 9
Transfer from one treatment class to another.. .. .. Clause 2 (5)
Travelling allowances outside of Canada.. .. .. Clause 13 (3)
Travelling and subsistence allowances.. .. .. Clause 13
Treatment compensation.. .. .. Clause 3
" definition.. .. .. Clause 1 (s)
" for a sequelae of venereal disease (Class 3).. .. .. Clause 2 (3)
" obtained privately.. .. .. Clause 2 (8)
" of non-pensionable disability (Class 2).. .. .. Clause 2 (3)
" only (Class 2).. .. .. Clause 2 (3)
" only allowances.. .. .. Clause 3 (13)
" persons eligible for.. .. .. Clause 2 (1)
" persons not eligible for.. .. .. Clause 2 (2)
" while undergoing training.. .. .. Clause 7

Unreasonable refusal of treatment.. .. .. Clause 4

Venereal disease, treatment for (Class 3).. .. .. Clause 2 (3)
Vetcraft operatives—accidents.. .. .. Clause 11
Vetcraft operatives—(Class 11).. .. .. Clause 2 (3)
Veterans' care cases (Class 4).. .. .. Clause 2 (3)
Vocational loans.. .. .. Clause 10
Vocational training.. .. .. Clauses 5 to 11

Wages, loss of.. .. .. Clause 13 (1) (iv)
War, the late—definition.. .. .. Clause 1 (r)
Wear and tear of clothing.. .. .. Clause 3 (12)
Widowers compensation.. .. .. Clause 3 (6)
Wife, common-law.. .. .. Clause 3 (11)
Wife and husband undergoing treatment.. .. .. Clause 3 (10)
Workmen's Compensation cases (Class 12).. .. .. Clause 2 (3)

APPENDIX II

ADMINISTRATION OF CANTEEN FUND

ONTARIO

Trustees:

Major-Gen. V. A. S. Williams, C.M.G., Chairman.
Lieut.-Col. Betram Hooper, D.S.O., M.C.
Capt. W. S. Haney, M.P.P.
Capt. Jules John Ferry.
Private Percy T. Bould.
Major Alexander C. Lewis, Secretary.

The Board of Trustees definitely organized on September 21, 1927, when a secretary-treasurer was appointed and instructed to formulate for consideration by the trustees a policy for the administration of the fund, and in February, 1928, active work commenced, the objects agreed upon being as follows:

1. For assistance in the education of children of ex-service men, special cases.
2. For relief of urgent cases amongst ex-service men (not pensioners), resulting from sickness, operations, etc.
3. For relief of urgent cases of widows and orphans of ex-service men (not pensioners), resulting from illness, etc.
4. No relief to be granted for conditions resulting from unemployment.

An effort will be made to transfer each year a sum of $10,000 from revenue to capital account for the purpose of bringing the capital sum to the amount of $1.000,000, and maintaining it at that figure for some years to come. It is felt that the demands for at least a decade could be met from the income from an investment of $1,000,000. This action was prompted by the belief that the heaviest demand on the Canteen Fund will commence in a few years when men who served overseas and who took their discharge in Category "A", who are not entitled to pension, will begin to break down under the strain of their daily vocations as a result of the shock to their nerves, while on active service, and will then require assistance, which could only be given them from such a fund as the one the board is administering.

The following is a statement of receipts and expenditures:—

Amount received	$ 977,671 83	Investments	$ 968,698 42
Interest	47,139 46	Relief	205 00
		Administration	319 62
		Balance on hand	55,588 25
	$1,024,811 29		$1,024,811 29

QUEBEC

Trustees:

Brig.-Gen. G. E. McCuaig, C.M.G., D.S.O., Chairman.
Brig.-Gen. E. de B. Panet, C.M.G., D.S.O.
Lieut.-Col. C. B. Price, D.S.O.
Lieut.-Col. John F. Buckley, Secretary.

The fund of the Province of Quebec has only commenced to function from the first of November, 1928, so there is no expenditure prior to that date, other than the rent of safety deposit box and revenue stamps for cheques issued prior to March, 1928.

Assistance may be granted from the fund to the following:—

Ex-members of the Canadian Expeditionary Force, who saw service in France or England in the late war, or members of the Royal Canadian Navy, who served overseas, except those who are in receipt of pension or assistance from the Government.

Any ex-member of the Canadian Expeditionary Force, who fulfills the above conditions, but is not in receipt of pension, may be helped by the fund, in case of sickness, accident, or circumstances beyond his control (other than unemployment) in such manner and for such length of time as the Board of Trustees may decide.

The fund is also applicable to dependents of deceased ex-soldiers, providing they are not in receipt of pension.

The following is a statement of receipts and expenditures, as submitted by the trustees:—

Amount received	$267,606 55	Investments	$288,660 94
Interest	21,408 60	Administration	34 00
		Balance on hand	320 21
	$289,015 15		$289,015 15

Nova Scotia

Trustees:

Capt. the Rev. Clarence MacKinnon, D.D., Chairman.
Major Edgar J. Vickery, Secretary.
Mr. John Vincent MacNeil.

The Nova Scotia Board of Trustees, with the co-operation of the Nova Scotia Branch of the Canadian Legion, made a wide survey of the objects to which the money could be devoted.

Special attention was given to non-pensioned T.B. cases among indigent ex-service men and their dependents. Thirty such cases were placed in Kentville Sanatorium, where there were as many as eighteen at one time. Expenses amounted to $14,000, and some patients are still being taken care of. Relief was also granted to the most needy and deserving cases, but as this, at best, is only a temporary palliative, the Board is seeking ways and means of making some more permanent arrangements. It is also pointed out that $3,400 has been repaid by ex-soldiers, who have been helped through this Fund.

The following is a statement of receipts and expenditures:—

Investments, as at 1.4.27	$ 94,092 82	Investments	$ 38,563 25
Loans outstanding, as at 1.4.27.	7,200 00	Unemployment relief	31,291 93
Balance on hand, as at 1.4.27	8,558 70	Sickness relief, less reimbursement	16,348 98
Interest	5,358 70	Special loans	11,397 13
Profit on investments sold	2,234 13	Education	224 00
		Grants to N.S. Legion	8,500 00
		Odministration	10,429 30
		Balance on hand	689 76
	$117,444 35		$117,444 35

New Brunswick

Trustees:

Major John S. Scott, Chairman
Major H. S. Priestman.
Major J. Gilbert Hart, Secretary.

There was no important change in the policy adopted previously by the New Brunswick Trustees, in the administration of the fund.

Relief has been provided as in the past to ex-service men and their families where definite need was shown, particularly in the case of widows and dependents not entitled to Pension.

The following is a statement of receipts and expenditures:—

Investments, as at 1.4.27.. ..	$82,658 37	Investments..	$82,658 37
Balance on hand, as at 1.4.27.	3,767 18	Relief..	4,969 30
Interest..	4,444 56	Administration..	1,230 78
		Balance on hand..	2,011 66
	$90,870 11		$90,870 11

British Columbia

Trustees:

Hon. Mr. Justice D. A. McDonald, Chairman.
Lieut.-Col. W. W. Foster, D.S.O.
Lieut.-Col. F. A. Robertson, D.S.O

The major portion of expenditures have been for relief purposes. The general policy of the trustees has been to grant assistance to ex-service men and their dependents, for relief of distress when caused by illness, emergency, or death. No grants have been made for straight unemployment relief. In cases of death, assistance has been given in a number of cases in the payment of funeral expenses.

It was generally agreed that the Canteen Fund should not be kept indefinitely, but should be used during the lifetime period of those who contributed to the fund.

The expense account for the year amounted to only forty dollars. It will be noted that the fund has not been charged anything for administration expenses. The fact that the Secretary of the Board of Trustees is also Chairman of the British Columbia Returned Soldiers' Aid Commission makes this possible; all necessary expenses such as office rent, salaries, stationery, postage, travelling expenses, etc., are included in the overhead charges of the Returned Soldiers' Aid Commission, which is a department of the provincial Government. As long as this arrangement continues, veterans are assured that the whole fund will be used for the benefit of ex-service men and their dependents.

The following is a statement of receipts and expenditures:—

Investments, as at 1.4.27.. ..	$233,185 95	Investments..	$233,185 95
Cash on hand, as at 1.4.27.. ..	21,718 34	Relief and grants..	27,121 49
Interest..	11,321 77	Administration..	40 00
Loans repaid..	260 85	Conference cost..	1,350 46
		Balance on hand..	4,789 01
	$266,486 91		$266,486 91

Manitoba

Trustees:

Brig. Gen. R. W. Paterson, C.M.G., D.S.O., Chairman.
Brig. Gen. H. M. Dyer, C.B., C.M.G., D.S.O.
Major D. M. Duncan.

The Trustees of the Manitoba Canteen Fund report that the total number of cases dealt with since the board commenced operations in February, 1926, has been 1,056, of these 619 cases being in the year under review. These figures do not in any way represent the amount of actual work done as the above entailed 7,628 services, not including the investigation of cases not found eligible for assistance.

The Trustees wish to place special emphasis on the fact that these extensive operations were made possible only by the co-operation of the Red-Cross, who have given their services to the board free of all expenses up to the present time. They have given notice, however, that after June 30, they will be unable to continue this service, and it will be necessary for the Board to set up its own machinery which will entail considerable additional expense.

The board has continued its educational work through the Khaki University and Y.M.C.A. Memorial Board and has given educational aid direct in a number of cases. The policy of the trustees has been to give such assistance as will fit the applicant to make his own way rather than to hand out relief in the ordinary sense of the word.

The following is a statement of receipts and expenditures, covering two years:—

Amount received	$245,317 52	Investments	$235,566 04
Interest	21,411 17	Relief	25,477 91
		Loans	470 28
		Poppy Day Fund	700 00
		Education	2,365 00
		Administration	1,826 06
		Balance on hand	353 40
	$266,728 69		$266,728 69

Prince Edward Island

Trustees:

Major Ernest H. Strong, M.C., Chairman.
Capt. Wm. A. McLaren.
Capt. Donald F. Tierney.

The Prince Edward Island Board of Trustees report that assistance to specially meritorious cases was given to ex-members of the forces, or their dependents. Sixteen cases came under this class during the past year, and any case where relief was granted or refused, was only so after careful investigation.

The Board is of the opinion that the Funds at their disposal will all be required to meet cases of the class above mentioned, which will continually arise amongst the returned soldiers or their dependents.

The following is a statement of receipts and expenditures:—

Deposit with Provincial Government, as at 1.4.27	$16,500 00	Investments	$16,500 00
Bank balance, as at 1.4.27	726 26	Administration	77 05
Interest	842 35	Relief	928 00
		Balance on hand	563 56
	$18,068 61		$18,068 61

Alberta

Trustees:

Lieut-Col. W. G. MacFarlane, Chairman.
Mr. G. H. Wade, M.D.
Mr. G. W. Waistell.

The board has not yet received any recommendation from the various association of ex-service men, dealing with the ultimate disposal of the fund. The board, therefore, continued its work of relief to deserving ex-soldiers until such time as some practicable scheme of utilization of the fund has been brought forward and approved by ex-service men generally within the province. Relief has been granted as far as possible when distress or sickness exists, but the funds are not used for straight unemployment relief.

The board considers that the number of applications for relief will increase from year to year, as some ex-service men are breaking down under the strain of maintenance of themselves and families. It is, therefore, essential that the greatest care be exercised in the dispensation of relief and that the fund be maintained as long as possible in order to deal with these cases for whom no other form of assistance is, at present, known to be available.

The following is a statement of receipts and expenditures, covering a period of two years:—

Amount received	$178,496 47	Investments	$171,701 82
Interest earned	14,321 18	Relief, less repayments	18,405 65
Profit on sale of bonds	1,600 00	Administration	2,818 30
		Balance on hand	1,491 88
	$194,417 65		$194,417 65

Saskatchewan

Trustees:

Capt. Albert Humphrey White, M.C., Chairman.
Dr. Charles Gordon Cox.
Lieut.-Col. James McAra.

Ten meetings were held during the second year of administration of this fund. During this period 170 applications were received, requesting financial assistance, and 96 were approved, involving an outlay of $8,177.05. Repayments have amounted to $640, and the sum of $1,127.70 has been repaid on account of relief disbursements.

No suggestions have yet been received from the returned soldiers' organizations as to the disposal of the principal and any relief granted has been done from the interest earned from investments.

The trustees are indebted to the Canadian Red Cross of Regina, for granting a continuance of free office space.

The following is a statement of receipts and expenditures:—

Investments, as at 1.4.27	$161,733 86	Investment at cost	$162,749 32
Balance on hand, as at 1.4.27	2,404 56	Relief disbursements, less repayments	6,519 09
Loans outstanding, as at 1.4.27	600 00	Loans less repayments	1,430 26
Interest	7,289 87	Advance outstanding	22 80
		Administration	769 02
		Balance on hand	537 80
	$172,028 29		$172,028 29

Yukon Territory

Trustees:

Mr. G. I. MacLean, Chairman.
Mr. Hamilton Daglish.
Mr. John F. MacLennan.

The fund is used to assist deserving cases of ex-service men, who are not eligible for assistance from other sources. Each case is being dealt with on its own merits.

The following is a statement of receipts and expenditures:—

Fund, as at 1.4.27	$5,105 00	Investments	$5,105 00
Balance on hand, as at 1.4.27	659 94	Loans, less repayments	545 80
Loans, as at 1.4.27	557 80	Bank balance	951 36
Interest	279 42		
	$6,602 16		$6,602 16

United Kingdom

The Canteen Fund in Great Britain is administered by the United Services Fund, in accordance with the regulations under which the British Canteen Funds operate. A considerable number of deserving cases were looked after and assisted through this fund, in matters pertaining principally to children's education, hospital maintenance and care of convalescing children of ex-service men.

The following is a statement of receipts and expenditures:—

	£ s d		£ s d
Fund, as at 1.4.27	10,028.16. 5	Relief	908. 1. 0
Interest	226.19. 5	Balance on hand	9,347.14.10
	10,255.15.10		10,255.15.10

American Red Cross

The American Red Cross, which operates the Canteen Fund in the United States, reports that the number of loans and grants made is considerably greater than in the previous year. The average expenditure per case has been about $57.00.

The report indicates that the preponderance of applications still remains in the Eastern area, although there has been a decided increase in the number in the Pacific area.

The following is a statement of receipts and expenditures:—

Fund, as at 1.4.27	$49,055 71	Relief	$ 3,918 32
Interest	2,374 89	Balance on hand	47,512 28
	$51,430 60		$51,430 60

Imperial Canteen Fund

Trustees:

Col. G. E. Sanders, C.M.G., D.S.O., Calgary, Alberta.
Brig.-Gen. J. A. Gunn, C.M.G, D.S.O., Toronto.
Lt.-Col. A. A. Magee, D.S.O., Montreal.

The following regulations govern the granting of assistance by the Board of Trustees of the Imperial Canteen Fund in Canada:—

In determining the eligibility of an applicant for assistance, actual need is the governing factor.

Eligibility for assistance is limited to Imperial ex-service men, discharged from the Army, or Royal Air Force, prior to the 31st of August, 1921; and to men who served with the Royal Naval Division, and to their dependents. Ex-naval men, other than those who served with the Royal Naval Division, shall not be eligible.

Preference in granting assistance is given to those who are suffering from a war disability. No portion of the said fuhd will be used for unemployment relief or other cases for which adequate relief is available from other sources.

The following is a statement of receipts and expenditures:—

Received from United Services		Investment	$12,115 95
Fund	$24,268 93	Loans, less repayments	2,822 00
Interest	1,110 19	Grants	3,255 22
		Administration	223 64
		Balance on hand	6,962 31
	$25,379 12		$25,379 12

DOMINION OF CANADA

REPORT

OF THE

DEPARTMENT OF HEALTH

FOR THE

FISCAL YEAR ENDED MARCH 31, 1928

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief of the Dominion of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to lay before Your Excellency the Report of the Department of Health of Canada for the fiscal year ended March 31, 1928.

I have the honour to be, sir,

Your Excellency's most obedient servant,

J. H. KING,
Minister of Health.

OTTAWA, August 1, 1928.

CONTENTS

	Page
Food and Drug Division	5
Narcotic Division	11
Proprietary or Patent Medicine Division	32
Pollution of the Inland Waters of Canada	34
Marine Hospitals Service	43
Quarantine Service	47
Leper Stations	56
Immigration Medical Service	57
Laboratory of Hygiene	65
Venereal Disease Control	66
Child Welfare Division	68
Hospitalization and Sanitation	70
Financial Statement	77

REPORT

OF THE

DEPARTMENT OF HEALTH

FOR THE FISCAL YEAR ENDED MARCH 31, 1928

OTTAWA, July 14, 1928.

Hon. J. H. KING, M.D.,
Minister of Health,
Ottawa.

SIR,—I have the honour to report on the Department of Health for the year ended March 31, 1928, under the following headings:—

1. Food and Drug Division.
2. Narcotic Division.
3. Proprietary or Patent Medicines.
4. Pollution of the Inland Waters of Canada.
5. Marine Hospitals Service.
6. Quarantine Service (including Leper Stations).
7. Immigration Medical Service.
8. Laboratory of Hygiene.
9. Venereal Disease Control.
10. Child Welfare.
11. Hospitalization and Sanitation.
12. Financial Statement.

J. A. AMYOT,
Deputy Minister of Health.

FOOD AND DRUG DIVISION

This was a year of progress with outstanding developments in connection with legislation and improvement in laboratory services. The Food and Drugs Act was amended to increase its usefulness and maintain a measure of protection to the purchasing consumer for whose benefit it was clearly intended.

By this amendment the statement of net contents, in terms of weight, measure, count, is required on all packages of food or drugs weighing two ounces or more, gross, whether such packages are sealed or not, excepting certain containers legalized by the Meat and Canned Foods Act. Deception by slack fill is also covered. The section of the Act of 1920 dealing with misbranding of foods was extended to cover drugs as well. Provision was made for control of drugs such as digitalis, ergot, strophanthus, vaccines, sera, tissue preparations such as pituitary extract, and arsenicals to be used for treatment by injection. For these, biological tests are necessary and it will take considerable time to develop a complete system of licensing, inspection and testing. Judging from the quality of these drugs as sold in Canada, there was a decided need for this extension to the Act.

In the revision of the statutes the Honey Act and the Maple Products Act were made to appear as Parts II and III, respectively, of the Food and Drugs Act.

Laboratory Services.—A laboratory has been opened in Toronto, in order to meet the increasing needs of a large centre of population and a very heavy port of entry. This will not only make the inspection service more effective, but will considerably reduce delays and expenses. Laboratory services are now provided at the following district centres: Halifax, Montreal, Ottawa, Toronto, Winnipeg and Vancouver.

The following table summarizes the laboratory work for this year:—

SAMPLES EXAMINED IN THE FOOD AND DRUG LABORATORIES

Nature of Samples	Laboratories					
	Ottawa	Halifax	Montreal	Toronto*	Winnipeg	Vancouver
From Inspectors of Food and Drugs	1,213	1,187	1,295	219	586	2,265
Department of Agriculture	325	20	574	.....	51	376
Royal Canadian Mounted Police	207	.....	62	4	58	91
Other departments of Government**	126	13	.....	.....	1,116	134
Miscellaneous	51	.....	86	2	4	8
	1,922	1,220	2,017	225	1,815	2,874

Grand total.....10,073

* Six week's operation.

** Soldiers' Civil Re-establishment, National Defence, National Revenue, Marine and Fisheries, Mines, Post Office.

Food and Drug Inspection.—The twenty-six inspectors of food and drugs reported a total of one hundred and fifty-four prosecutions during the year. Of these ninety-nine were for meat and meat products, resulting very largely from an effort to enforce the regulation respecting the use of chemical preservatives and colouring matter in sausage and hamburg steak. The remaining prosecutions cover maple products, soft drinks, spices and drugs. Fines, fees and costs collected amounted to $11,178.30. It is to be remembered that in administering the Act all possible effort is made to secure compliance with the law without resorting to prosecution. It is only where adulteration or misbranding is wilful, persistent or dangerous, that legal proceedings are instituted. The number of prosecutions does not, therefore, fully portray the activities of the inspection.

Foods

The following comments are offered respecting some of the more important items in connection with the work on foods.

Baking Powder.—During the year, twenty-eight samples of baking powder and baking powder materials were examined, chiefly for available carbon dioxide and freedom from excessive amounts of metallic impurities. Warning was deemed necessary to one manufacturer because the finished product was slightly substandard. Statement of net weight was omitted from another line. One blunder committed by a wholesale house would have been followed by serious consequences, had there not been prompt and effective check. In this instance, cockroach powder containing a fluoride was sold by mistake instead of baking powder.

Beverages.—Four hundred and fourteen samples were analyzed in the laboratories and in addition to this control many labels were inspected from the standpoint of the Food and Drugs Act. This trade represents many problems from the regulatory standpoint, partly because small operators are entering the field from time to time and many labelling defects arise on a plea of lack of information. In general there is no great difficulty in securing reasonable compliance with the requirements of the Act. Far more serious is the wilful use of saccharin which is prohibited and the use of preservatives without label declaration, as required by the regulations. It was found necessary to institute twenty-six prosecutions for offences arising from these two sources. It is to be hoped that these will have the effect of improving the beverage trade.

Butter.—One thousand and seventy-seven samples of butter were analyzed during the year. This work was done largely in co-operation with the Department of Agriculture in the enforcement of the Dairy Industries Act. Strict control was kept of the butter importations, particularly at the port of Vancouver. Inspection was made of 25 shipments from Australia, 291 from New Zealand, 1 from the Fiji Islands and 9 small shipments from the United States. It was found that there was general compliance with the regulations respecting preservatives, particularly that limiting boric acid. Two of the shipments from the United States were refused entry because of excess moisture content.

Cocoa.—Of fifty-six samples of cocoa powder all proved to be of fair quality. In some instances, particularly in the cheaper powders sold from bulk, the fat content was comparatively low but in the absence of excess shell or fibre they met the standards generally accepted on this continent.

Eggs (Processed by drying or refrigeration).—Fourteen import shipments from China were examined at the laboratories in Vancouver and Halifax and found to be of satisfactory quality.

Figs.—This fruit always presents a special problem because the fig is particularly subject to infestation with insects and moulds. One hundred samples were examined in the laboratories. From the results obtained, five comparatively heavy shipments were refused entry. Two of these, however, were but trial shipments made by a New York importer, who, finding a huge consignment from the East refused entry to the United States at the port of New York because of defective quality, endeavoured to re-ship them to the Canadian market. As this attempt was not successful further shipments were not made. In comparing the condition of this fruit as sold now with what it was a few years ago, a decided improvement is noted in the general quality of figs coming from Smyrna and other countries in the East. The industry there is evidently making a successful effort to meet the higher standards demanded by inspection on this continent.

Fruits, Dried and Evaporated (Apricots, Peaches, Raisins).—One thousand one hundred and sixty-four samples of dried fruits of all kinds, were taken from import shipments. In the collection of samples there is full co-operation with the Department of National Revenue. Entry was refused to many shipments because of excess sulphites. These exclusions from the Canadian market cover ten shipments of apricots and two shipments of peaches. This condition contrasts very favourably with that noted a few years ago, before this control was instituted.

Ice Cream.—One hundred and ninety-eight samples of this important food gave, upon analysis, results indicating in general, a fair observance of the regulations fixing the standards of quality. It was found necessary, however,

to call the attention of certain manufacturers to the fact that they were trying to standardize their products too closely to the minimum of 10 per cent milk fat.

Maple Products.—There is a considerable improvement in the quality of the products sold this year. The brown sugar cakes and certain syrups, formerly sold during the maple season, did not appear in the trade, apparently as a result of the special effort made last year to enforce the sections of the Maple Act, which prohibit the sale of any such sugar or syrup resembling maple sugar or maple syrup. Twelve prosecutions for adulteration were brought to a successful issue. Considerable laboratory work was also done for the investigations and relief of the problems of this industry.

Meats and Meat Products.—Six hundred samples of these products were examined in the course of the year. The results of analysis gave rise to ninety-nine prosecutions because of adulteration in sausages and hamburg steak. Persistent efforts have been made to maintain quality in these products and to combat the wishes of those who would use dyes in a deceptive manner and employ chemical preservatives as a substitute for proper refrigeration and careful handling. An observance of the regulations would undoubtedly improve the market in these products by establishing confidence in the mind of the purchasing consumer. It is quite impossible to handle meat carelessly and to disguise or arrest incipient putrefaction, to prevent spoilage by the use of sulphites and give the purchaser a product of good quality. In some districts the trade has failed to appreciate these facts, although in other localities the market in such meat products is on a much more satisfactory basis.

Nuts (Almonds, Filberts, Peanuts, Pecans, Walnuts, etc.).—In the course of the year 485 samples of nuts of all kinds were examined in the laboratories. Most of these samples came from import shipments held in customs pending the result of analysis. This has been found to be a far more satisfactory policy than any procedure based on attempts to inspect after the goods are distributed to the trade. Several very heavy shipments were refused entry and a few were reconditioned before sale was allowed. A decided improvement of the quality noted in previous years was observed in all lines. One stock consisting of ten cases of shelled walnuts was disposed of by confiscation and destruction as it was quite unfit for food.

Spices.—The results obtained in the analysis of 911 samples of spices of all kinds indicate some improvement in the general quality of these products as sold, but in view of the fact that such analytical work has been conducted annually since 1876, it is evidently a difficult matter to legislate this trade into honesty. It has been found necessary to make several very heavy seizures of adulterated pepper containing over 30 per cent of rice flour. These, consisting of several tons, will be disposed of by forfeiture and donations to charitable institutions. In addition to this imporant case, thirteen prosecutions were instituted for the adulteration of spices. As a result of the inspection at ports of entry the quality of imported spices, particularly that of nutmegs, shows decided improvement over that of previous years. The trade cannot, therefore, complain of unsuitable raw materials.

Other Important Foods examined may also be mentioned briefly, the numbers following each item indicating the number of samples analysed during the year: Cheese, 41; macaroni and spaghetti, 94; flavouring extracts, 85; fish, 46; food colours, 192; coffee, 33; prepared milk, 74; jams, 49, etc.

Drugs

Acetylsalicylic Acid.—This drug is very widely sold under a variety of trade names, the majority of which give no clue as to their chemical composition. One stock of five-grain tablets was found defective with respect to weight. These so-called five-grain tablets weighed only 4·77 grains, the acetylsalicylic acid content being 4·5 grains. These failures indicate careless manufacture. Fortunately this condition has not become general. There was a great improvement in the general run of market samples of this drug as compared with those collected last year and two years ago.

Belladonna Preparations.—Belladonna preparations were dealt with in two articles published in the Journal of the Canadian Medical Association (August, 1927, Vol. XVII, page 923; also October, 1927, Vol. XVII, page 1187). There seems to be considerable confusion in the matter of labelling these preparations and the quality of many samples was decidedly inferior. Subsequent samples show some improvement in the market but it will likely require considerable time for the trade to appreciate the importance of maintaining quality in these products.

Camphor, Spirits of.—In the following up the work done in 1926, further samples of spirits of camphor were procured and analysed. One stock, found to contain only 7·25 grams of camphor per 100 cc. was held in detention until brought up to the requirements of the B.P. (10 per cent). The product of one manufacturer was found to contain brucine, as it had been made from a denatured alcohol, the sale of which (as rubbing alcohol) is authorized by the Department of National Revenue.

Camphorated Oil.—Occasionally samples of this preparation come to the laboratory for analysis, as it enjoys extensive sale and use, although not regarded as an important potent drug. Apparently the majority of manufacturers have adopted the formula of the United States Pharmacopoeia, in which cottonseed oil is used instead of the olive oil specified in the British Pharmacopoeia. There is no evidence that cottonseed oil is unsatisfactory as a vehicle for the camphor and if properly labelled as a United States pharmacopoeial product, its sale in this form does not conflict with the requirements of the Food and Drugs Act.

Ether, Anaesthetic.—Ether for anaesthesia continues to present a problem. Several samples have been found not to meet the requirements of either the U.S.P. or the B.P. Defective stocks have been drawn from the market on several occasions. There seems to be less difficulty in manufacturing satisfactory ether than there is in maintaining quality in containers while passing through the channels of trade and the storage period preceding use in the operating rooms. The deterioration of ether has been the subject of many technical investigations and it is hoped that a study, now in progress in the laboratory, will assist in improving matters.

Hydrastis (Golden Seal).—Fifty-one samples of commercial preparations of Hydrastis were examined and made the subject of a special report (Canadian Medical Association Journal, 1927, Vol. XVII, p. 1317). Only 23 per cent of the liquid extracts and about 15 per cent of the tinctures met the pharmacopoeial requirements. There is great confusion in labelling and evident lack of standardization by the manufacturers. Publication of details has been made, largely as a formal warning. Effects will be judged by results of subsequent collections.

Hydrogen Peroxide.—A number of samples collected in the district of Ottawa were found to be substandard, the available oxygen in one instance as low as six per cent instead of the ten per cent required by the pharmacopoeia. These were traced back to manufacturing jobbers who had been making decidedly amateur attempts at preparing this drug for the market. As the manufacturing processes for making and stabilizing peroxide solutions of satisfactory quality are now well past the experimental stage, there is no excuse for gross failure in marketing a product which will be satisfactory to the purchasing consumer. A seizure of existing stocks was necessary to secure adjustment. Subsequent examinations have shown a decided improvement in the quality of the peroxide purchased in retail stores.

Iodine, Tincture of.—There was a recurrence of complications arising from apparent misunderstanding of the iodine content of a certain grade of denatured alcohol furnished by the Department of National Revenue. The manufacturer responsible for the error was compelled to withdraw substandard stocks from the market. It is to be hoped that the revision of the British Pharmacopoeia, now pending, will provide different standards, sufficient for all the needs of the trade, and relieve the situation complicated by the use of the same name for solutions of widely variant strength.

Medicated Wines.—It is held that a label declaration must be made of the medication claimed to be present and that such medication shall be in a manner detectable by the usual methods of analysis. Large stocks in Toronto were held until there was compliance with these conditions. This has no bearing upon the possible misuse of these wines for beverage purposes, as it was clearly not the intent of the Food and Drugs Act to limit or restrict the sale of alcoholic beverages. The regulations require, however, that label declarations shall be reasonably accurate.

Nux Vomica Preparations.—The results obtained in the analysis of forty-one samples of Fluid Extract of Nux Vomica and of sixty-five of Tincture of Nux Vomica, procured on the open market in the drug stores of the several provinces of Canada, revealed a very undesirable condition of affairs. Fifty-five per cent of the tinctures and sixty-three per cent of the fluid extracts failed to meet the requirements fixed by the British Pharmacopoeia. Details were fully presented in an article published in the Journal of the Canadian Medical Association (July, 1927, Vol. XVII, page 803). A subsequent collection showed some improvement although it is evident that carelessness in preparation and marketing has not been entirely eliminated. One pharmaceutical manufacturer protested vigorously against being penalized, after much extensive warning, because he was found to be using a method of assay fundamentally in error. Undoubtedly it is the duty of both manufacturers and dispensers to pay great attention to the quality of this drug as sold.

Sulphur Ointment.—It was found upon inspection that one manufacturer was dispensing this preparation made with a petroleum base. As the pharmacopoeias and standard works do not recognize such an ointment as official, the product must be regarded as adulterated.

Drugs, Narcotic

Four hundred and sixteen samples were analyzed for the purposes of the Opium and Narcotic Drug Act. In a great majority of cases certificates were used for court cases. In this very exacting work, requiring extra care and skill, very satisfactory services were given by the analysts in the Ottawa laboratory and by the analysts in charge of the branch laboratories. There still remains for adjustment, the sections of the Act which have been construed as requiring the appearance of the analyst in court.

Patent Medicines

During the year sixteen samples of patent medicines were examined in the laboratory, chiefly for the purpose of comparing the composition of preparations actually on the market with that indicated by the formulæ submitted with the application, prior to the assignment of registration number. In one instance the alcoholic content was in excess of the amount claimed and the accompanying medication decidedly low. In another case the strychnine content was at variance with the facts, apparently because of the manufacturer confusing strychnine with nux vomica. There was a full measure of co-operation with the Proprietary or Patent Medicine Division in dealing with the claims made for registered preparations upon the label or otherwise.

Other Drugs

From the standpoint of the administration of the Act, the most difficult problem presented in connection with drugs arises from the flagrant advertising employed in the marketing of preparations sold under distinctive names, which are not to be found in any pharmacopœia or generally recognized standard work on materia medica or drugs. The amendment to the Act, made during the 1927 session of Parliament, prohibits the making of false or exaggerated claims for any drug. It has taken considerable time for all parties interested to become informed of this amendment but plans are being made for an extensive campaign to protect the purchasing public from being misled by improper advertisements. It is hoped that prosecution of a few of the worst offenders will serve as an example and that the ultimate result will be an improvement in these matters.

NARCOTIC DIVISION

The Narcotic Division of the department had a very busy year, as a result of which it may safely be stated that the narcotic situation in Canada continued to improve.

In so far as the legal traffic was concerned, some three hundred more ounces of cocaine were imported than in 1927, while there was a marked reduction of nearly two thousand ounces in the morphine entering Canada, with a small reduction of fifty pounds of crude opium as compared with the previous year.

In November, 1927, a meeting was held in Ottawa between officials of the department and representative wholesalers, licensed to handle narcotics, at which a number of important points were discussed, both from the standpoint of the administrative control of narcotics, and also the commercial aspect thereof, as a result of which certain standard rules were agreed to, and all license holders circularized accordingly, the principal points being:—

(1) That narcotic orders, in transactions between wholesalers, should be signed by a responsible person, who would designate under his signature his status in the firm issuing the order.

(2) That narcotics despatched by wholesalers direct to physicians, at the request of, and which were charged to retail druggists, should be reported monthly as sent to the druggist or physician concerned, thus rendering it possible to keep an accurate record in the department of the total quantities of narcotics received by physicians from all sources.

(3) That telephone or telegraph orders for narcotics should not be accepted by wholesalers, and that proper written orders therefor must be actually on their premises, and passed upon by a responsible officer of the firm before the despatch of the narcotics.

(4) That preparations containing less than one-quarter grain of morphine per fluid ounce, or two grains of opium per ounce, could be supplied to retailers in small packages not containing over sixteen ounces, without a narcotic order, if properly labelled, as provided under section (8), as being unlawful to administer to children under two years of age.

At the request of the wholesalers, all hospitals were circularized, pointing out that under the Act narcotics could only be obtained for a hospital on a physician's order, which had to be on the premises of the wholesaler before the narcotics were shipped. It was also pointed out that in some cases it was known that hospitals had no superintending or resident physician, and that there might conceivably be a reluctance on the part of any one of several attending physicians to take the responsibility for signing such orders, in which case there would be no objection to their being countersigned by either the lady superintendent, the buyer, or the dispenser, for the protection of the physician, but that the latter's signature was an absolute essential under the Act.

In so far as the retail druggists were concerned, the inspection of a large number of drug stores was undertaken, and this work will be continued from year to year. In a very considerable proportion of cases various conditions, more or less serious, which were in contravention of the Act, were discovered, such as the acceptance of narcotic prescriptions not properly signed or dated, neglect to enter narcotic transactions in the narcotic register, the holding of blank prescriptions signed in advance by physicians, etc. In every instance, in addition to a verbal warning issued at the time of inspection, a letter was despatched from the department to the drug store concerned, explaining the law on the subject, with follow-ups where necessary, until an assurance was received that the Act would be more carefully followed in future. In this way it was possible to very materially improve conditions affecting the retail sale of narcotics without recourse to the courts. While any retail druggist is limited to the purchase of a maximum of one ounce of any one narcotic in any one month, there were found to be a few whose legitimate requirements, by reason of their being located in a large centre, or of having handled for many years the orders of their local hospital, exceeded the maximum. In every such case, where conditions warranted it, permission was given for the purchase of a larger supply.

In so far as physicians are concerned, a large amount of work was undertaken in an endeavour to compile, and keep up to date, a complete list of those "registered as medical practitioners, and in good standing under the Act governing the practice of medicine and surgery" within the various provinces. The same procedure was followed with regard to dentists and veterinary surgeons, and the thanks of my department are due to the registrars of the various associations in the nine provinces for their co-operation, and for the very considerable trouble which they took in that regard. When such lists were finally compiled, it was found that certain persons had been in the habit of obtaining narcotics, who were not legally entitled to do so. Such cases were immediately adjusted, and continue to be as they arise, so that it can now safely be said that the system of control of narcotics in the legal traffic is as efficient as it is possible to make it.

Many physicians were communicated with, whose purchases or presciptions for office use were above the average, and while the department has neither the right nor desire to interfere between a physician and his patients in cases where a medical condition exists which requires the use of narcotics, I regret to state that a certain proportion of cases was discovered where the narcotics obtained were not being administered in accordance with the Act. In some instances patients were being given large quantities daily, under circumstances

where no condition other than addiction existed. Some of these cases were of long standing, dating back to the period before there was an Opium and Narcotic Drug Act, which made such conditions illegal. No one appreciates more earnestly than I do the unfortunate situation in which the practising physician is placed in cases such as these, but if some consideration is given to the subject, it will be realized how impossible it is to permit their patients to continue indefinitely to receive large quantities of the drugs to which they are addicted. The unfortunate physician, with one or more of such cases on his hands, quite naturally says:—

"It is against the law for me to continue to treat these cases as I have done in the past, yet what am I to do with them? There are no institutions in my province where proper treatment is available, or if there is such a place, it is a private institution where the fees, in so far as my cases are concerned, are prohibitive."

At present the only answer available to the department is that the responsibility for the care and treatment of addicts, by the provision of institutions therefor, or the making available of accommodation in existing institutions, with power to commit addicts thereto for treatment, is just as much a provincial obligation as is the care and treatment of the tuberculous or the insane, and although this phase of the narcotic problem has been strongly stressed for many years past, Alberta is the only province in Canada where both power to commit and provision for treatment exist, although Nova Scotia has passed legislation in that regard without, however, making it effective by providing the necessary accommodation. If, in such circumstances, the department allows matters to continue as formerly, the intention of Parliament, as expressed in the Opium and Narcotic Drug Act, is not being carried out, and we are failing in our obvious duty, not only because the law on the subject is perfectly clear, but because, from our own experience, we realize how essential it is to prevent matters remaining as they are, and have these unfortunate people continue as addicts for the balance of their lives. Similarly, if they are allowed to carry on as before, and receive what narcotics they want from their attending physicians, everything remains quiescent, and no government, provincial or otherwise, could be expected to undertake the expenditure involved in the provision of institutional treatment if, by reason of everything remaining quiescent, no particular purpose would apparently be served, and with no public opinion apparently demanding a change. I have also in mind the fact that by endeavouring to enforce the provisions of the law as it now stands, we undoubtedly are of considerable assistance in co-operating with the physician concerned in effecting cures in a certain number of cases, particularly where the patient concerned is possessed both of a certain standing in the community, and of a real desire to be cured. Letters received from physicians at the successful conclusion of such cases more than make up for the lack of success or co-operation which are also experienced in other instances, and I cannot for one moment agree that we should merely abandon all effort to cope with the evil effects of drug addiction so long as we are achieving even a small measure of success, which would, however, be undoubtedly increased to a marked degree if the remaining provincial governments filled the crying need which exists for the provision of institutional facilities within their borders, to which narcotic addicts could be sent by the physicians practising in their provinces, and thus in many cases render it possible to return to a normal life, members of their own communities, who are in many instances entirely susceptible of being again made decent citizens, and also not only free the members of the medical profession from a condition which many of them feel to be more intolerable as each year goes on, but perform a social service which would be of incalculable benefit.

Cases of addiction, other than those of the underworld, naturally become known to us only in the strictest confidence, and I venture to state that if the medical profession had at its disposal the machinery for handling the narcotic addict in a manner somewhat similar to that of the insane, in so far as administration is concerned, the results in some provinces at least would prove surprising, and more than worth while. Drug addiction as an underworld accompaniment may be with us permanently, and underworld associations will always result in a large percentage of reversions after cure, but there are many persons in the higher planes of life who would almost certainly never revert if given the chance of cure under conditions involving the control both of the patient and his narcotics during treatment, which are recognized as being absolutely essential if concrete results are to be obtained. Furthermore, every drug addict removed from the streets, and sent to an institution for treatment, not only lessens the demand to that extent, and thereby renders more effective the efforts which are made to control the illicit traffic, but reduces the criminal activities of the underworld type, who, in so many instances, embark on a life of crime to furnish the means whereby they may cater to their craving. It is also well known that "addicts breed addicts", and any steps taken which tend towards the control and cure of those already addicted, cannot fail to have their effect in preventing the spread of this most insidious habit.

During the year it was unfortunately necessary to institute proceedings against seven physicians, two veterinary surgeons, and three druggists. As cases against medical men naturally result in considerable comment from those not familiar with the circumstances, it might be well to point out that no prosecution is entered until a most careful investigation has been made, which investigation is not initiated as part of a general campaign, but because definite suspicion exists in a particular case. In every instance the evidence available is carefully weighed in the department, and authority to prosecute is not issued unless the circumstances in the case are such that it is considered to be in the public interest, and in the proper administration of the Opium and Narcotic Drug Act to do so.

In order, therefore, that there may be no misunderstanding of the circumstances, which the department encounters in dealing with this class of case, I deem it advisable to quote such details in regard to some of them, without giving the names or places, as will, I trust, make the situation clear.

(1) Doctor "A", resident in a large city, being strongly suspected of commercializing in narcotics by supplying numerous peddlers and addicts, was interviewed by an agent, who arranged to purchase, and paid in advance for, $7 worth of cocaine. This narcotic, being purely a local anaesthetic, could not conceivably be sold by an honest physician under such circumstances. Later, on the same day, the doctor delivered the cocaine, and expressed a desire to sell drugs by the ounce, as a result of which another appointment was made, on which occasion a deposit of $14 was paid, and arrangements made for the delivery of an ounce of cocaine and the payment to him of the balance of the purchase price. At this interview Doctor "A" tried to sell an ounce of morphine as well, stating that he was short of money and needed $50 by the end of the week. In due course the cocaine was delivered, and on examination was found to consist of one-half ounce only. Subsequent investigation proved that the doctor had, on the same day, purchased one-half ounce of cocaine from a wholesaler, and as no narcotics were found in his office, it is reasonable to assume that he deliberately supplied only one-half of the quantity agreed upon and paid for. He was arrested, and eventually sentenced to eighteen months' imprisonment, the judge making the following remarks when sentencing him:—

"Doctors who make a living selling drugs will get severe sentences if caught. They are supposed to look after these unfortunate people, and not help them in their habits. It is a more serious offence for a doctor, owing to his position, to be selling drugs illegally, and severe punishment will be given to them."

(2) In the same city Doctor "B", also under strong suspicion, agreed to sell one ounce of cocaine to an agent for $35, and stipulated that he make the delivery at a house some doors away from his own office. In due course delivery was so made, and on his being arrested, the purchase price, in marked money, was found in Doctor "B's" pocket. He admitted the facts, and claimed that he had mixed three-quarters of an ounce of some other drug with the cocaine, and estimated that he had actually sold only one-quarter of an ounce of the narcotic. He would, therefore, have received $35 for something which cost him $3. He made the additional statement that he had not been practising long, found it difficult to get a start, so sold narcotics to make a little money. He pleaded guilty, and was fined $200 or three months' imprisonment.

(3) In another city Doctor "C", being under suspicion on account of a large number of narcotic prescriptions known to have been issued by him to straight addicts, was visited, and sold twelve and one-half grains of morphine for $12, at the same time promising to obtain cocaine and a larger supply of morphine for a future transaction. On a later date he sold twenty grains of heroin for $20, and after four transactions in all, was arrested in due course, found guilty, and sentenced to from six to twelve months' imprisonment.

(4) In another locality Doctor "D" was suspected of supplying narcotics to a young addict under conditions which amply warranted investigation. As a result an agent purchased from the physician eight grains of cocaine, and forty-six morphine tablets, arranging also for further purchases. Five days later ten grains of cocaine, and twenty-five morphine tablets were purchased. A week later seven grains of cocaine were sold for $5. Shortly afterwards Doctor "D", in return for $11, sold ninety-two morphine tablets, a bottle of cocaine solution and four needles. A week later he sold twenty-eight morphine tablets, four grains of cocaine, and two prescriptions for twenty-five morphine tablets, and ten grains of cocaine respectively for $22. He was arrested on that occasion, convicted on the first charge, and committed to trial on the remaining five. He appealed against the conviction, but the Appeal Court of the province dismissed his appeal, and sentenced him to three months' imprisonment. The Chief Justice in delivering judgment stated:—

> "The court is of the opinion that the defendant was properly tried, and on credited evidence, properly convicted."

He subsequently pleaded guilty to the remaining five charges, and received similar sentences on each, to run concurrently.

In so far as the two cases against veterinary surgeons were concerned, these were both in the same city, and as the department had strong reason to suspect that narcotics were purchased illegally from them, an agent found that he had no difficulty in purchasing cocaine by the ounce. The court imposed a sentence of three months' imprisonment in each instance.

In the prosecutions of retail druggists one case was developed as a result of an investigation being made into another matter, it being ascertained that although the accused had been a druggist for twenty-five years, he kept no narcotic register whatever, although narcotic prescriptions, the subject of the other investigation, which were known to be forged, were being filled. The department had ample reason to take action in this case, and a fine of $200 was imposed.

In the other case, which was one of selling paregoric illegally, which preparation contains one-quarter of a grain of morphine per fluid ounce, the conditions were such as to reveal a very distressing set of circumstances, upon which it is not advisable to dilate, and my department felt that court proceedings were necessary. A fine of $50 and costs was imposed.

The Illicit Traffic

While there has been a decrease in the number of convictions obtained for breaches of the Opium and Narcotic Drug Act during the period under review, the year has been one of exceptional activity on the part of the officers administering this Act, and the policy of aiming at, and continuing to aim at real traffickers has been amply justified, and produced highly satisfactory results. To the furtherance of this end, the Department of Justice, at my request, communicated with the Attorneys-General of the various provinces, pointing out that if, in the ordinary course of the administration of justice, the police forces, both provincial and municipal, within their jurisdiction, would undertake the responsibility of developing and prosecuting the smaller narcotic cases; such as the small street deck peddler, the keepers of opium joints, and the frequenters thereof within their cities and towns, this would relieve the federal officers of a vast amount of petty detail, to say nothing of the saving of time which they were otherwise required to devote to attending court on numerous occasions owing to the frequent remands in connection therewith, which time could be much better devoted to the larger cases, and those of an interprovincial or international character. This change was effected during the summer of 1927, and by means of personal visits to many of the police forces concerned, a basis of mutual co-operation was arranged, which has already proved to be of the greatest assistance. It was realized that some cases required the expenditure of considerable money, which the previously calculated budgets of the local police forces were not prepared to assume, and it was, therefore, arranged that if certain municipal police forces, in the course of keeping their streets or territory clear of the small peddler, encountered an unexpectedly big case, or one in which the various processes of appeal or Habeas Corpus were invoked, the department, as a temporary measure, would furnish, on request, and free of cost, trained legal assistance to represent the Crown in such instances. Similarly, a great improvement was effected by the employment, so far as was possible, of lawyers who would specialize on narcotic work. It can be easily realized that in many of the larger cases, which we handle, money is no object on the part of the prisoner when the evasion of a penitentiary sentence is his aim, and every possible process of law is resorted to with that objective in view. Various new points are constantly being brought before and decided by the courts, and as such cases are concluded, the facts and decisions are at once communicated by the department to the lawyers handling narcotic cases throughout Canada, so that they are at all times au fait with what is going on in the Dominion as a whole; previous errors can be guarded against, and effect given to judgments rendered in various provinces, which are of importance in the rest of the Dominion. The wisdom of this procedure has been particularly exemplified during the past year, when, on the Crown proceeding to appeal in British Columbia against a four-year sentence, on the ground of inadequacy, a seven-year term was imposed by the Appeal Court, under conditions which were almost immediately duplicated in Winnipeg, when prompt action on our part resulted in similar action being taken in that city with equally satisfactory results, although the Vancouver case had not as yet appeared in the Official Law Reports. As an instance of the numerous legal points which are raised by a narcotic trafficker, it will be found that no less than seven narcotic cases are reported in the last volume published (49) of Canadian Criminal Cases, and they are well worth the study of those interested in this problem.

Of the 490 convictions obtained during the year, 351 involved Chinese, but it will be noted from the details of a number of cases included in this survey that the connection of members of that race with the narcotic situation in Canada is by no means limited to operating or frequenting opium joints, but

extends to trafficking not only in opium, but in the three drugs, morphine, heroin and cocaine, which are more commonly the drugs of addiction for Occidentals. It will also be noted that of the 490 convictions, 200 were for possessing or selling narcotics, 166 were for offences in connection with opium smoking, while for 124 we have no definite details. During the year arrangements were made with a press clipping agency for news-clippings covering all narcotic cases appearing in the press, and as a result I hope in future years to be in possession of details in connection with the great majority at least of the cases handled by municipal police forces, or at least those of sufficient interest to warrant a newspaper item. Great assistance in connection with the smaller cases has been furnished by the British Columbia Provincial Police, who have handled many on their own initiative, and assisted us in others, while the work of the city police forces in Montreal, Toronto, Winnipeg, Saskatoon and Vancouver has also greatly aided in ridding our streets of the smaller trafficker, with occasional cases of larger calibre occurring in which the mutual co-operation has been all that could be desired.

The work of the Royal Canadian Mounted Police has been of the highest calibre. Their co-operation has been whole hearted and painstaking, and I have on many occasions had my attention drawn to the extraordinarly careful and clever methods by which most intricate cases have been developed.

I also desire to pay tribute to the most valuable assistance which has been accorded to us by the narcotic authorities of the United States. Co-operation between the two countries in this regard is of almost daily occurrence, and two of our most important cases have been brought to a successful conclusion largely through their loaning us the services of one of their best operatives, which enabled us to inject into the proceedings that element of trained knowledge, combined with a complete freedom of any possibility of recognition, which is so essential in dealing with the " higher-ups ". This was particularly exemplified in a case which had its origin in the United States, the trail leading thence to Windsor, then Montreal, and finally to the Pacific coast, where we were able to convict a man known for many years as the leader of the narcotic operators there, who had been previously arrested twice, but had always succeeded in avoiding conviction, although a number of his associates had been imprisoned. This gang were known to be using two very fast motor boats in smuggling very large quantities of narcotics into Canada from the Orient. The details of this case are extremely interesting, and as they afford a good idea of the difficulties which are encountered in developing cases of this nature, they are quoted at some length.

During the summer of 1927, as a result of certain arrests in Detroit, information became available that the source of supply of the opium involved was located in Montreal. With a combination of the services of a special investigator of the United States Narcotic Service, and officers of the Royal Canadian Mounted Police, specially brought in from an outside point, a careful investigation was made in Montreal, as a result of which opium in large quantities was purchased from a certain source in that city. Matters progressed in such a manner, however, that it was definitely known that the large Montreal supply emanated from Vancouver, and that there was a reasonable chance of getting at the main operators in the latter city. The Montreal cases were, therefore, deliberately left open, and our activities transferred to the Pacific coast. It would not be in the public interest to disclose the methods then adopted, but it is possible to state that as a result of a very careful reconnaissance of underworld conditions in Vancouver Chinatown, and the use of certain letters of introduction to intermediaries therein, our special operative was eventually introduced to the " big boss ", Lim Gim, who was president of a large Oriental importing house, and had many other financial interests. This operative, posing

as a large trafficker in New York, was closely questioned by Lim Gim, with regard to his acquaintances in those circles in the East. Lim Gim displayed a thorough knowledge of the various operators on the Atlantic seaboard, both in the United States and Canada. Our operative told him that he wanted to buy two hundred tins, over $10,000 worth, of genuine Lem Kee opium, to take to New York, where there was a good market. At a subsequent meeting Lim Gim stated that he could not furnish that quantity of Lem Kee, adding:—

"We are having a bad time in getting it off the boats now. Sometimes we get it out of the water, and sometimes not. The law is pretty tough now. I could have had 700 cans, which are now in the water off Seattle, but the Seattle connection bid higher for the goods so I let them have it. I get more calls for Lem Kee from the States. I sell more of my No. 2 here, which is a very good grade, about eighty per cent as good as Lem Kee. I have direct wires pulling in Hong Kong, and have the first option on any stuff coming from China. That is how I know 700 tins have gone to Seattle. About fifteen years ago I was in partnership with three other men (whose names were given). At that time I had the market cornered in opium both in the States and Canada, as I used to do all the buying, and nobody got any opium except through us. We broke up two years later, each making $20,000."

After further details which it is not advisable to disclose, he stated:—

"I sold one hundred cans of Opium three weeks ago to a fellow from Frisco. It was No. 2 and he liked it very well. About the same time a Chinaman from the East bought one hundred and fifty cans. There is no chance for you to get Lem Kee when I haven't got it. You couldn't get two hundred cans of any kind of stuff from anybody here but me as I control it all on the Pacific coast. You know when you went to see (——) last week, he was going to get the stuff from me so you see that I am the big connection."

Lim Gim then suggested that they arrange a code for use in letters and telegrams, the letters "Vancouver B." being selected to represent the figures from one to ten, the name "George" for Lem Kee opium, and "Smith" for No. 2 opium. He also arranged to do business under the name of Charles B. Young, and handed over a card bearing his address. He was then shown a prearranged telegram purporting to come from our operative's partner in New York stating, when decoded, that seventy-five cans were to be shipped within a week if possible. As Lem Kee was not available in large quantities, it was finally arranged that ten cans of No. 2 opium should be bought as a sample, smuggled into Seattle, and shipped thence by express to New York. If, on arrival, the New York partner was satisfied with its quality, he would telegraph our operative at Seattle, and a further deal would be arranged.

It will be appreciated that it was an extremely difficult matter to win the confidence of a man such as this big operator, and to get him to do business personally, but the prospect of a big order immediately, with others to follow, probably induced him to take a personal interest. At any rate, on the following day, our operative visited Lim Gim at his store at night, and paid him for ten cans to be delivered the following morning, Lim Gim's reason for an early delivery being that "The law is all in court, and it is the best time to deliver it." Delivery was made by Lim Gim himself, who showed the operative how to wrap the tins up in paper so that they would get past the Customs at Seattle. He then placed two tins in each of the operative's five pockets, and promised to see him again the following week. The cans were in due course turned over to the police, while the operative proceeded to Seattle to stay there for the period during which the shipment was supposed to be en route to New York. During these various interviews the operative was carefully shadowed into and out of the store, and all money used was carefully marked.

While in Seattle the operative wrote to Lim Gim in the agreed code, and in due course received a reply which, in part, read as follows:—

"Mr. *A. B. B. Smith* is now in town. He will be ready to do business at any time. Let me know soon as Mr. Smith is going away shortly."

This was the code indication that two hundred cans of No. 2 opium were now ready. A reply was sent both by telegram and letter telling Lim Gim that the deal would be put through on the following Sunday or Monday. The telegram was duly traced by the Vancouver authorities to Lim Gim's store, and a fake telegram, purporting to be from the New York partner to the operative, was prepared for production to Lim Gim to satisfy him that the New York end was satisfied with the grade of opium. The operative then returned to Vancouver, and by means of a telephone conversation with Lim Gim, which was listened to on an extension, a meeting was arranged for the same evening, on which occasion Lim Gim raised the price $10 per can. He was shown the New York telegram, which, it was pointed out, referred to the price previously quoted. He expressed his regret, but would not agree to any reduction, and finally a purchase, at the higher price, was arranged. At an interview the same evening he discussed in great detail narcotic conditions in New York, and the seizure of 1,070 cans of opium on a Blue Funnel boat at Seattle the previous week, about which he was worried, remarking:—

"You know, when that boat was in here about two weeks ago, we couldn't get the load off. I have got some No. 1 coming in to-day, but don't know whether we can get that off either."

He was then paid $1,100 for twenty more cans to be delivered the following morning, on which occasion the store was surrounded by officers in concealment, who were to rush in on receiving the prearranged signal of the operative tipping his hat, it being calculated that one minute and thirty seconds would elapse from the signal being given to the presence of the officers in the store, and the covering of the front and rear exits. The operative entered the store, and shortly afterwards, Lim Gim came down from the sleeping quarters upstairs. He told the operative to take the package from a barrel which he pointed out. This the operative did, and then proceeded to the front of the store and gave the signal, returning immediately thereafter to Lim Gim, and paying him a balance of $50 due him. He then followed him to the back of the store, and informed him that he was under arrest. Lim Gim shouted, "What! My God! My God!" several times, ran into the cashier's office, put his hand in the wastepaper basket, and then ran upstairs, where he was found in a bed other than his own with the clothes pulled over him.

A most thorough search of the premises, which lasted all day, revealed amongst other things the marked $50 bill in the cashier's cage, and the $1,100 in marked money paid for the opium on the preceding evening, while in the wastepaper basket, to which Lim Gim made his first move, were the torn pieces of the letter and envelope addressed to him in the name of Charles B. Young by the operative while in Seattle. There were many other pieces of corroborative evidence which, however, it is unnecessary to enumerate. Lim Gim was in due course tried at the Assizes, where the defence was a complete alibi for all the numerous interviews outlined above. He was found guilty on the two charges laid, and sentenced to four years in the penitentiary, with a fine of $1,000. Being a naturalized Canadian citizen he is not eligible for deportation. At the time of sentence, however, the judge remarked as follows:—

"You are what is termed a wholesaler as distinct from an ordinary peddler of dope or cocaine. The sentence would be heavier were it not for the fact that your friends have presented a wonderfully worded petition for leniency. It is signed by people I cannot ignore. I will allow this petition and the letters to be filed, and later you may get some additional advantage from them."

The prisoner having appealed, the Crown proceeded to cross-appeal on the ground of inadequacy of sentence. The decision of the Court of Appeal is given on pages 255-7 of Canadian Criminal Cases, Volume 49, in which it is stated as follows:—

"The sentence of the court is that the sentence be increased to the maximum permitted by law, viz., seven years, in each case, and in addition a fine of $1,000 in each case, the sentences of imprisonment to run concurrently, and the prisoner to pay the costs of each proceeding here and below.

"While the discretion of the trial judge is not lightly to be interfered with, yet the statute has imposed on the court the duty to review that discretion. In this appeal it was stoutly contended by counsel for the Crown that the judge had proceeded on evidence which was not legal evidence or was not in accordance with past practice. He was handed a petition asking for leniency signed by a number of business men of Vancouver, which appears to have influenced him in imposing sentence.

"The petition is well described as wonderfully worded, but we think the trial judge was in error in receiving it. The proper practice in the presentation of evidence in mitigation of sentence is set forth in Archbold's Criminal Pleading, Evidence and Practice, where it is said:—

> 'As an aid to determining the appropriate punishment, the court will after verdict hear evidence for the Crown or the defendant, either *viva voce* or by affidavit.'

"While we have felt impelled to disapprove of this novel innovation at its inception, we are yet of the opinion that, apart from the influence of the petition on the trial judge's discretion, we ought, in the other circumstances of this case, to increase the sentence to the limit of our powers."

Lim Gim is now serving his seven years' sentence in Westminster Penitentiary.

In so far as the *Maritime Provinces* are concerned, conditions in regard to the narcotic traffic are eminently satisfactory, only three breaches of the Act having been detected, one of which, a charge of possession of opium, resulted in a six months' sentence, while in the other two cases fines were imposed.

In the *Province of Quebec*, which, by reason of the facilities existing for importations from overseas through the ports of Quebec and Montreal, and the proximity of New York with its heavy illict importations, is one of our most important centres, there was a marked improvement, and both the United States authorities and the officials of my department are convinced that Montreal is no longer a centre of distribution for narcotics destined to the United States. The conviction of the gang in that city, who specialized in large international shipments, referred to in my annual report for last year, had a very marked effect, and rendered it possible to devote an increased amount of attention to other traffickers who operated solely within our borders. The Montreal city police were extremely active in ridding their streets of the small peddler, with the result that there has unquestionably been a very great improvement in that regard. Of the 99 convictions in the province of Quebec, 67 involved jail or penitentiary sentences, including one of 5 years, one of 4 years, four of 2 years, six of 18 months, and five of 1 year. Thirty-seven, or roughly one-third of the convictions obtained, involved Chinese. The following are typical of the cases handled:—

A. B. was known for many years to be a large retail trafficker in Montreal, usually making deliveries of narcotics by means of an automobile, but it proved on many occasions most difficult to arrange matters so that they would be actually in his possession if arrested. After a careful study of his methods, and the arrangement of a transaction through agents, the place agreed upon for delivery was carefully watched. A. B. was seen to engage in conversation with several men recognized as addicts or drug runners. He then re-entered his car with two of them, proceeded to a lane, and on emerging therefrom with one of them they were both arrested. The second man, C. D., was carrying an oblong parcel, which he threw down and started to run. This parcel, when recovered, was found to contain five ounces of morphine, heroin and cocaine. In the possession of A. B. were certain keys which were found to fit a padlocked trunk in his place of residence, which contained thirty-five ounces of narcotics, a large number of empty boxes, decking papers and scales used in the peddling of narcotics. A. B. was eventually sentence to two years and a fine of $1,000, while C. D. jumped his bail, and is now living in the United States.

As a result of certain arrests in western Ontario, it became fairly certain that a Chinaman, E.F., in Montreal, was selling opium on a large scale. Two large buys were made from him under police conditions, but owing to the fact that information from other sources, obtained during this investigation, indicated that an opportunity existed to get at a large wholesale source of supply in Vancouver, which proved to be correct, as reported above, these cases were deliberately held over, and the officers despatched to the Pacific coast. On the successful conclusion of the work there, they returned to Montreal, where E.F., apparently secure in the knowledge that past transactions had proved both profitable and safe, was quite willing to sell a further large quantity, and invited our operative to lunch at a cafe. In the course of the meal a purchase of over $1,100 worth of opium was arranged, and E.F. paid for the meal with one of the marked $50 bills involved in the opium transaction. At the time set for the delivery of the opium, the premises were entered by our officers, and the opium seized, while some of the marked money was found in the Chinaman's pocket and the balance in a cash drawer in the store. He was eventually sentenced to twelve months' imprisonment and a fine of $1,000.

In the *Province of Ontario* there were 50 convictions, 28 of which involved Chinese, including one sentence of 3 years; five of 2 years; two of 18 months; eleven of 1 year; and four of 9 months. Most of these cases were developed in Toronto, in which city conditions have now very considerably improved. The situation at Windsor was also the subject of a special investigation, but the cases developed there have not as yet been finally concluded in the courts. As samples of the type of cases encountered in Ontario, the following are quoted:—

G.H., considered to be the largest retail trafficker in Toronto, and possessed of a long criminal record, was the subject of a long and careful investigation extending over many weeks, at the conclusion of which, upon an addict being seen to leave the premises, he was arrested, and a complete search made of the house. The eventual touching of a button on the top of a bureau in a bedroom disclosed a secret drawer which contained eighty-nine decks of morphine and cocaine, and $375 in money. G.H. was arrested, sentenced to two years' imprisonment, and died in jail. It was later found that his wife was still carrying on narcotic transactions on the same premises, and offering to exchange morphine for stolen goods. A lady's coat was purchased, and exchanged in that manner, while other cash transactions were put through. The wife was eventually arrested, and sentenced to six months' imprisonment, and a fine of $600. After her arrest a thorough search of the house revealed a hiding place hollowed out in one of the beams in the cellar, in which a further quantity of narcotics was found.

I.J., recently discharged from the penitentiary from serving a narcotic sentence, was reported to have gone back into the narcotic traffic shortly after his release. Some months afterwards he, having moved over one thousand miles to another city, was found to be operating in his new location. After his methods had been studied, and shortly after he had visited another city for a fresh supply of narcotics, his apartment was searched, and he was found in possession of a quantity of heroin and a loaded revolver. He was eventually sentenced to two years' imprisonment. While the search was being made in this case, another man was seen in the vicinity acting suspiciously. He was brought into the apartment, searched, and found with morphine in his possession. He was well known to the police, and had previously served a narcotic sentence. He was awarded twelve months' imprisonment and a fine of $500 and died in jail.

Early in the year it came to our knowledge that a man well known as an addict was making a practice of victimizing physicians in several parts of Canada by selling them worthless stocks, and obtaining morphine under pre-

tence of being desirous of taking a cure. Having convinced one physician in particular of his desire to be cured, the latter made arrangements for him to be placed in hospital, which, however, he consistently evaded, and rewarded the doctor for his trouble by stealing a prescription pad from his office, and proceeding to forge his name to a series of narcotic prescriptions. He was located before he had succeeded in having many of them filled at drug stores, and received a well earned sentence of from six months to two years on four charges in connection therewith, and at the same time pleaded guilty to ten charges of theft in connection with his selling of worthless stocks.

In the same city it was learned that an American race-horse owner, who visited Canada several times each year, was in the habit of selling narcotics on the occasion of such visits. An investigation was conducted, on both sides of the line, which lasted over a year, with the result that it was eventually possible for our officers to purchase narcotics from him, and to arrange for a larger supply. Certain available information as to the source of supply in the United States was obtained and transmitted to the narcotic authorities of that country, and finally, after another purchase of heroin and cocaine had been made from him, he was arrested and the marked money involved in the transaction found upon his person. A search of his rooms revealed the presence of considerable quantities of narcotics, an automatic pistol, and correspondence indicating his narcotic activities. He was released on $10,000 bail, which he jumped. A thorough search was made for him on both sides of the line, and probably because the chase became too hot for a man so well known as he was, he gave himself up some weeks later, was sentenced to six months' imprisonment, with a fine of $600, and deported at the end of his sentence.

It was noticed from narcotic sales reports received from wholesalers in the same city that a certain veterinary surgeon, whose name did not appear on the list of those registered to practise in the province, was regularly obtaining an ounce of morphine, and a similar quantity of heroin monthly. Inquiry elicited the fact that no such veterinary surgeon existed, and with the assistance of the wholesaler concerned, arrangements were made to shadow him on the occasion of his next purchase, when it was ascertained that he was selling these narcotics to the underworld. On the occasion of his next purchase he was arrested when leaving the wholesaler with two bottles of cocaine in his possession. He admitted that he had no right to purchase narcotics, gave his correct name and address, and was sentenced to two years' imprisonment with a fine of $1,000.

In the *Province of Manitoba* there were 12 convictions, all confined to Winnipeg, and three of which involved Chinese. Included in these were two sentences of 3 years; one of 18 months; two of 1 year; and one of eight months.

In the case of A.B. and C.D., two well known and large traffickers, with ramifications extending throughout the entire underworld of Winnipeg, a very careful investigation was made of their activities, as a result of which it was ascertained that the car in which they made their deliveries of narcotics was preceded by another car, which made certain that the coast was clear, and then speeded away while the transactions were concluded. Finally, after several attempts had failed through sheer hard luck, advice was received of a fresh consignment of narcotics having reached them, and an unknown operative was imported in order to avoid any possible slip up. Posing as a bootlegger from the United States, this agent succeeded in arranging for a purchase of three ounces of heroin for $270. A meeting with A.B. was arranged in a cafe, where C.D. joined the party, and the three then proceeded to an apartment where the three ounces of heroin and the purchase price changed hands, these men promising to deliver a further twelve ounces in two weeks' time. They were arrested and taken to the Police Station despite an offer of $1,000, which they made

for their freedom. C.D. jumped his bail of $20,000, thereupon his bondsmen were called upon to fulfill their obligations. This they failed to do, and as it developed that the justice of the peace who granted bail had been grossly imposed upon, proceedings were taken against them, they having disappeared in the meantime. They were subsequently located, apprehended on a Writ of Capias, and lodged in jail, subsequently pleading guilty to a charge of perjury. The effect of this action in regard to "straw bail" in a number of cases proved excellent, and several bondsmen asked to be relieved of their responsibility "for the appearance of their prisoners." Meanwhile, A.B. pleaded guilty, and was awarded the minimum sentence of six months' imprisonment. The department felt that this was totally inadequate in the case of a large trafficker, and entered an appeal on the ground of inadequacy of sentence, as a result of which his sentence was increased to three years by the Manitoba Court of Appeal. This very interesting judgment is quoted in Volume 49 of Canadian Criminal Cases, pp. 298-302, and in the course of delivering same the court stated:—

"In the reasons for judgment in several cases cited it is pointed out that the judge who presides at a trial, and sees and hears the witnesses is in a much better position to determine the proper sentence than a Court of Appeal. The authorities both here and in England lay down the rule that the Court should not interfere unless it can see that the trial judge has proceeded on some wrong principle. The present case stands in quite a different position. The accused pleaded guilty and this court is in as good a position as the trial judge to determine the sentence which should be imposed . . . The narcotic problem in Canada is a very acute one. The Government is evidently alarmed at the existing conditions, and determined, if possible, to stamp out this illegal traffic. In an effort to effect such a laudable object it is entitled to every assistance this court can legitimately give it. The authorities have no difficulty in apprehending the addict himself but for obvious reasons have the greatest possible difficulty in securing evidence against the man responsible for the existence of the traffic, namely, the vendor. The imposition of the minimum sentence of six months would not, in our opinion act as a deterrent to others who would be tempted by the enormous profits to engage in this traffic. Moreover, we are of the opinion that Parliament never intended the minimum penalty to be imposed on a person guilty of one of the most serious offences mentioned in section 4."

In another Winnipeg case, our offices got in touch with a well known peddler, who was known to be operating extensively. Working on a prearranged plan the locality most frequented by him was covered, and he was seized while engaged in his narcotic activities. He put up a strong resistance, and was seen to throw away a match box, which was found to contain eleven decks of heroin. He was found guilty at the Assizes and sentenced to eight months' imprisonment with a fine of $200.

Another case in Winnipeg was that in which we had reason to believe that a parcel in the mails contained a large quantity of narcotics. With the hearty co-operation of the postal authorities, an officer disguised as a postman delivering mail made the delivery of this particular parcel at the address designated thereon, to the person who claimed that it was for him. He was arrested, and eventually sentenced to three years and a fine of $200. A subsequent appeal on his behalf was dismissed. Curiously enough, during a subsequent raid on an apartment in a city over one thousand miles away, the original post office receipt for the insured parcel in this case was discovered, and the possessor thereof was also awarded a sentence of imprisonment.

In *Saskatchewan* as a whole we have very little trouble, there being only 13 convictions, 10 of which involved Chinese. One sentence of 2 years, two of 18 months, two of 1 year, and one of 10 months are included therein. Most of these cases were in Saskatoon where a pretty bad state of affairs was uncovered in the small Chinese underworld at that point. A suitable agent having been detailed to ascertain local conditions, it was found that the Chinese had practical control of all narcotic supplies in that city, which were sold to

white people and Chinese alike. Small purchases were made from time to time, while a full knowledge of existing conditions was being obtained, and a point for delivery selected which would permit of police supervision of the transaction. We received the most hearty co-operation of the Saskatoon city police in these cases, in the course of the development of which it was ascertained that it was a common practice, when an addict had "stung" a Chinese peddler for the supply of every addict in the city to be cut off for twenty-four hours until they were all sick, as a reminder to them all to play squarely. Finally four Chinamen were arrested for selling narcotics. The evidence obtained indicated that one of them had sold drugs to an agent in our employ for four months, that he had compelled her paramour to steal goods for him, and when her man was sent to jail, further supplies were refused to her until she stole a handbag for the lady friend of the Chinaman. After the agent had been supplied with a purse for this purpose, she exchanged same, together with some money, for a supply of cocaine, under conditions which were susceptible of corroboration both by mounted and city police officers. This man received a sentence of eighteen months and a fine of $1,000.

One of the other Chinamen, who was proved to have sold to the same agent, received a similar sentence, the magistrate remarking that,—

"There is no provision in the Act for ordering him to be whipped. I think there should be provision and that the time is near when the law will be amended to that effect. This is one of the most serious crimes the courts have to contend with."

The two other Chinamen convicted of selling received sentences of one and two years respectively.

In *British Columbia*, with a Chinese population of approximately 25,000, we, of course, encountered our greatest difficulties in connection with the illegal importation and sale of opium, while owing to the position occupied by Vancouver as a leading Pacific coast port, we also encountered cases in which narcotics are brought in, and offered for sale, from other countries as well. It is also thoroughly well established that the Chinese dope peddler as a rule by no means confines his activities to opium, but also handles considerable quantities of morphine, heroin and cocaine. Consequently our efforts have been unsparing to effectively cope with their activities, with the result that the number of cases handled in that province is over one-half the total for whole Dominion. Of the 291 convictions obtained, about one-half were for the comparatively less important cases of smoking opium or frequenting opium dens, but it will be noted that there were 59 convictions for being in possession of narcotics, 32 of which involved morphine or cocaine or both, while there were 18 further cases of selling. Thirty-eight of those convicted were not of Chinese origin, and consisted of 32 British and Americans; three Italians; two Hindus; and one Negro. Some severe sentences, amply warranted by the facts, were imposed, including one of 7 years, one of 5 years, two of 4 years, eight of 3 years, six of 2 years, and four of 1 year. Of these heavier sentences, 20 were imposed on Chinese.

By far the most important case was that of Lim Gim referred to above, but the following details in connection with others will to some extent indicate our difficulties on the Pacific coast, and the efforts being made to overcome same, it being borne in mind that in many instances it is not advisable to disclose full details.

A.B., possessing peculiar facilities for liaison with the officers and men of ships of a certain nationality entering Vancouver, was strongly suspected of arranging for the importation of narcotics from overseas, and disposing of them in that city. After careful preliminary investigation, and the necessary introductions, arrangements were made for him to sell fifty ounces of cocaine for $2,250. At the last minute, however, the deal fell through owing to a sale

having been arranged in another quarter, but another transaction was arranged to be put through on the arrival of the next boat a month later. Owing, however, to a special guard and search of this vessel in connection with an expected shipment of liquor, no attempt was made to land any narcotics, and matters were postponed for another month. In due course A.B. delivered samples of both morphine and cocaine, and offered for sale one can of opium for $100. A large deal involving the purchase of thirty ounces each of morphine and cocaine, and six tins of opium for $4,800 was initiated, but delivery was refused until the money was paid in advance, under conditions which rendered its eventual recovery impossible A smaller deal was then arranged for, and in due course AB was arrested in a hotel, with narcotics and marked money in his possession. He pleaded guilty, and was sentenced to two years and a fine of $200.

Information being received that a certain Japanese, C.D., was offering for sale cocaine obtained from overseas, steps were taken which resulted in an officer being introduced to him by another Japanese, E.F. In due course the latter stated that C.D. had forty-five ounces of cocaine, and sixteen ounces of morphine, for which, after considerable bargaining, the latter agreed to accept $1,600. Samples were purchased, and found to be of good quality. Arrangements were made for delivery by car on one of the main streets of Vancouver. E.F. arrived first, and on being satisfied that everything was in order stated that the deal would proceed. C.D. thereupon drove up in a truck, whereupon one officer posing as a taxi driver and another as a passenger drove as arranged to the courtyard of a well known club. They refused to do business in the club, whereupon C.D. and E.F. got into the taxi with a sack containing the narcotics in their possession. They handed same over, were paid $1,600 in marked money, and the car was then driven to the police station. A search of their places of residence disclosed a further small quantity of cocaine on the premises of C.D. They were committed for trial, in due course receiving sentences of three years with a fine of $1,500, and six months with a $200 fine respectively. C.D. applied for Habeas Corpus on the ground that the Opium and Narcotic Drug Act was ultra vires. This application was dismissed, the Supreme Court of British Columbia issuing a very full judgment which is reported in Canadian Criminal Cases, Volume 49, pp. 392-401, in the course of which it is stated:—

"When I view the 'mischief' sought to be remedied, and the manner in which this was to be accomplished, the state of the law as it existed prior to the Act of 1923, and the nature of the remedy thus applied, I have no hesitation in holding that the Act in question is criminal and not licensing legislation. The primary object was to create a crime and afford punishment for its infraction. The licensing provisions were necessary but did not affect the validity of the legislation. It was within the competence of the Dominion Parliament and did not invade the jurisdiction allotted to the province by the British North America Act. While such legislation constituted a new crime, it was remedial, in order, if possible, to destroy an existing evil. It was for the promotion of 'public order, safety and morals,' and was enacted by Parliament for the public good. While not in doubt as to the validity of the Act, I might add that it was entitled under section 15 of the Interpretation Act, R.S.C., 1927, c. 1, to receive such:—

> "'Fair, large and liberal construction and interpretation as will best ensure the attainment of the object of the Act and of such provision or enactment, according to its true intent, meaning and spirit.'"

In another case, a Chinaman, G.H., located in Victoria, had, in 1925, been convicted for the possession of sixty tins of opium, which conviction had been quashed on appeal on the ground that he had been convicted under the "Opium and Narcotic Drug Act" and not the "Opium and Narcotic Drug Act of 1923." He was known to be heavily interested in the smuggling of narcotics from overseas, and consequently when a careful survey of conditions on Vancouver island was made in the fall of 1927, it became evident that his activities were still widespread. An officer posing as an American drug peddler

was able to get in touch with one of his runners, and a trial shipment of opium was ordered and delivered. A further consignment was arranged for, twenty-five ounces of cocaine for $800 being offered in addition to the opium. Further details were being obtained as a result of these transactions, as to the manner in which the gang of which G.H. was the head were doing business, and a final buy of $800 worth of opium was then arranged. Upon the officer visiting G.H.'s store to pay him the amount involved in the transaction, he was told to come back later, and pay the money to another Chinaman, who would hand over the opium. At the second interview, however, G.H. accompanied the officer to a street address where he introduced another Chinaman, instructed him to receive the money, and arrange for the delivery of the goods. The officer was then handed over to a third Chinaman, who actually made the delivery, whereupon, on a pre-arranged signal, other officers closed in and all three were arrested. On a search of the premises a large quantity of opium smoking paraphernalia, revolvers and ammunition were found. At the trial a comprehensive alibi was sworn to by numerous witnesses for the defence, the prisoner's movements at a point eighteen miles from Victoria on a certain date, when the prosecution swore he was trafficking in that city, being described in great detail. As defence witnesses, however, swore that there was no snow on the ground on the date in question, and that the roads were in perfect condition, we were able to prove by Government weather recorders that there were eight inches of snow on the ground, which effectively disposed of the alibi in so far as that particular date was concerned. G.H. was sentenced to three years and a fine of $350. He appealed, but his appeal was dismissed. He, however, jumped his bail of $10,000 and has not as yet been located. The two other Chinamen were sentenced to four years with a fine of $1,000 and two years with a fine of $200 respectively.

Another case involving a Chinaman and a Hindu in Vancouver was very cleverly handled by the officers of the Royal Canadian Mounted Police. The Chinaman was ascertained to be running a vegetable store as a blind to his narcotic activities, which were conducted in a very cautious manner. A search of his premises having produced no results, it was found that he subsequently completely changed his method of delivery, and had recently received a pound of morphine, for which he had paid $600, and a pound and a half of cocaine from overseas. Several agents failed to gain his confidence, and establish a connection with him, but finally a deal for one-half an ounce of morphine was arranged, the Chinaman offering to supply any quantity of morphine, heroin or cocaine. Delivery was to be in a park, and officers being concealed in surrounding bushes, the Chinaman duly appeared, carefully surveyed his surroundings and went away. He returned in fifteen minutes, took the agent into some brush just outside the park, and pointed to a package lying on the ground saying, "There it is." This package was subsequently found to contain morphine. A later deal, involving cocaine, was made, and on this occasion the Chinaman again met the agent in the park, and took him down the street where he introduced him to a Hindu, who stepped off the road, picked up a package, and handed it to the agent. This was found to contain cocaine. It was then decided to continue to make purchases until conditions were such as would permit the obtaining of evidence which would be sufficient in court to directly connect both these Orientals with the crime of drug trafficking. The Chinaman arranged with the officer for the use of a code over the telephone so that an order for four tons of potatoes would mean four drams of morphine, and a similar quantity of carrots would represent cocaine, while one ton would in each case represent one dram. Several other deals were put through, the officers spending long hours, both late at night and early in the morning, concealed in surrounding bushes. One deal was arranged by telephone, which was

listened in on an extension, and officers dressed in workingmen's clothes proceeded to various points from which it was thought probable that the movements of these two traffickers could be watched. The agent then met the Chinaman, who walked him round three blocks, and finally took him behind the "Leap the Dips" at Hastings Park, where he was paid a sum of marked money. The Chinaman then called the Hindu, who came up, and handed over a package of morphine. When their arrest was decided upon, a final deal was made, on which occasion the Chinaman met the agent, proceeded to some bushes where he was paid, and he then told the agent to walk to a certain street and wait there fifteen minutes. When he met the agent there the Hindu was with him, the latter handing over one dram of morphine and promising to deliver another three drams the same night. On that night he delivered two drams, and promised the balance later. The Chinaman was not then present so it was necessary to arrange still another deal, when the Chinaman met the agent, received the money, and walked away. He was seen entering the Hindu's shack, from which, in a short time the latter emerged, met the agent at a pre-arranged spot, and handed over a package of cocaine. The transaction was observed by several officers, and upon the Chinaman being arrested, marked money was found upon his person. The Hindu's shack was then searched, when morphine, cocaine, decking papers and a set of scales were found concealed under a stove in the woodshed, the keys of which were in the Hindu's possession. The Chinaman was sentenced to five years and a fine of $500, while the Hindu received a sentence of two years and a fine of $200. This case is given in considerable detail, as indicating the extreme patience and care required in developing a case of drug trafficking. The magistrate warmly complimented all concerned, stating that rarely, if ever, had he seen a case where everything was so complete without any unfairness, while the Crown prosecutor for Vancouver city stated that it was the best prepared case he had had to handle in his fifteen years of experience, it being remarkable the way in which the evidence was worked out

In a North Vancouver case a Chinaman was known to be selling morphine. He was visited on several occasions, and morphine purchased each time, the vendor stating, "Chinatown decks not so strong, mine much better." He was eventually arrested, with marked money in his possession, at the time of sale, together with another Chinaman, who was mixed up in the case. A search of the bushes in the vicinity of their house revealed a supply of morphine and opium. They were each sentenced to three years and a fine of $500.

In another Vancouver case a Chinaman was sentenced to four years, and a fine of $500 for selling narcotics, and while in the city jail was found in possession of a package of morphine cleverly hidden in a piece of sugar cane which had been hollowed out to receive it.

In a Victoria case, in which the Chinaman concerned had been sentenced to two years and a $220 fine, an application for Habeas Corpus was made on the ground that a conviction for "distributing" opium to one person, as charged, was illegal, distribution to one person being impossible. The wording of the Act appeared to be plain enongh, reading as it does, "gives away or distributes to any person," and the application was dismissed, the court stating:—

"Whatever force there may be in the submission as sought to be applied to that expression detached from the context, and in a strictly literal sense, is met by section 15 of the Interpretation Act, which reads, 'Every Act and every provision or enactment thereof shall be deemed remedial where its immediate purport is to direct the doing of anything which Parliament deems to be for the public good, or to prevent or punish the doing of anything which it deems contrary to the public good, and shall accordingly receive such fair, large and liberal construction and interpretation as will best ensure the attainment of the object of the Act, and of such provision or enactment according to its true intent, meaning and spirit.'"

Another Vancouver Chinaman known to be selling morphine and cocaine in lots from one ounce up, was approached by an officer posing as a drug peddler from Seattle, and after a purchase of one ounce at $68, and a subsequent purchase of half an ounce, an offer was made to supply ten ounces the following week. A five-ounce deal was arranged, and paid for, the Chinaman being arrested at the time of delivery, and sentenced to two years with a fine of $200. He had had three previous narcotic convictions, but had hitherto escaped deportation on a technicality.

Information obtained, as a result of the above case, resulted in the arrest and conviction of another Chinaman long known as the third largest trafficker on the Pacific coast. An agent, after proper introduction and the establishment of confidence, paid him $40 for a supply of cocaine to be delivered later. A search warrant was obtained, and after the agent had received delivery at a hotel of which the Chinaman was proprietor, the premises were thoroughly searched. One of the rooms particularly suspected, and locked with a Yale lock, was found to contain a set of scales, opium labels, one cocaine label, and the marked money paid previously for a supply of cocaine, while hidden in the walls were found ninety-seven cans of opium, and over six ounces of morphine and cocaine. In the cash box was found over $1,000 part of which was the marked money paid to the prisoner in the case previously mentioned, for a five ounce buy, which clearly showed the source of supply. This case was bitterly contested in the courts. The Chinaman, at the time of his arrest, was in possession of a large number of documents, one of which, on translation, proved to be an agreement under which, in 1920, he had purchased a girl in China for $120 and brought her to Canada as his daughter. As he elected to give evidence on his own behalf, he was open to cross-examination, and we had no difficulty in establishing that he had perjured himself in connection with the importation of this girl. He was sentenced to three years, and a fine of $200, otherwise a charge of perjury would have been proceeded with. Many of the documents seized were of the greatest value to our officers, and included an agreement with a certain party overseas, as to prices for narcotics, and the distribution of the financial risk in landing them in Canada. We also obtained a very comprehensive code with words covering the various phases of illicit operations in the smuggling into Canada of narcotics from the "starting work as soon as the boat arrives" and "the string has been put down" to the final phase, satisfactory no doubt from their point of view, "no goods left, all sold out." An appeal was taken in this case, but unanimously dismissed. Habeas Corpus proceedings were also dismissed, and when this man is deported at the end of his sentence, Canada will be thoroughly well rid of him.

I am convinced, and my opinion is confirmed by information obtained from a number of sources, that our systematic method of "going after" these big traffickers, a policy which has been energetically followed up during the period subsequent to that now under review, has at last begun to tell, and that we are gradually getting a firm hold upon the narcotic situation on the Pacific coast.

TABLE No. 1A.—DETAILS OF INFRACTIONS AGAINST THE OPIUM AND NARCOTIC DRUG ACT FOR THE JUDICIAL YEAR ENDED SEPTEMBER 30, 1927. (FIGURES NOT AVAILABLE FOR THE FISCAL YEAR)

Provinces	Nature of Offence										
	Breach of Opium and Drug Act, not further defined	In Possession of				Smoking Opium	Selling Narcotic Drugs	Dispensing Narcotic Drugs	Keeping Opium Den	Frequenting Opium Den	Total
		Opium	Cocaine	Morphine	Drugs not specified						
Nova Scotia	2	1	...	...	...	...	...	...	...	...	3
Quebec	5	1	...	...	63	...	9	...	...	21	99
Ontario	13	3	...	...	18	4	8	...	...	4	50
Manitoba	2	4	3	2	...	...	...	...	...	1	12
Saskatchewan	9	...	...	...	2	1	1	...	...	...	13
Alberta	13	2	1	...	4	1	1	...	...	...	22
British Columbia	80	18	14	18	9	79	8	10	...	55	291
Totals	124	29	18	20	96	85	27	10	...	81	490

TABLE No. 1B.—DETAILS OF INFRACTIONS AGAINST THE OPIUM AND NARCOTIC DRUG ACT FOR THE JUDICIAL YEAR ENDED SEPTEMBER 30, 1927

Province	Total Convictions		Sentence			Racial Origin									
	Male	Female	Option of a fine	Committed to gaol without option	Sentence deferred	British and American	Chinese	French	Italian	Polish	Russian	Jewish	Hindu	Negro	Total
Nova Scotia	3	...	2	1	...	...	3	...	...	...	...	...	...	...	3
Quebec	86	13	30	67	2	33	37	24	1	2	1	1	...	...	99
Ontario	43	7	41	9	...	20	28	...	...	...	...	2	...	...	50
Manitoba	7	5	4	8	...	9	3	...	...	...	...	...	...	...	12
Saskatchewan	13	...	10	3	...	3	10	...	...	...	...	...	...	...	13
Alberta	22	...	18	4	...	5	17	...	...	...	...	...	...	...	22
British Columbia	285	6	222	67	2	32	253	...	3	...	...	...	2	1	291
Total	459	31	327	159	4	102	351	24	4	2	1	3	2	1	490

TABLE NO. 2

(a)—NUMBER OF IMPORT AND EXPORT LICENSES ISSUED DURING THE FISCAL YEAR ENDED MARCH 31, 1928

Import licenses	332
Export licenses	61

(b)—NUMBER OF WHOLESALE AND RETAIL DRUGGISTS' LICENSES ISSUED FOR THE CALENDAR YEAR 1928

Wholesale druggists'	108
Retail druggists'	24

TABLE NO. 3.—Amount of Narcotic Drugs imported into Canada, under the licensing system which became effective during the year 1919, for the fiscal years ended March 31, 1919-1928, inclusive

—	Cocaine	Morphine	Crude Opium
	oz.	oz.	lb.
1919	12,333	30,087	34,262
1920	6,968	28,198	13,626
1921	3,310	12,214	2,953
1922	2,952	8,774	1,700
1923	3,330	10,998	1,373
1924	1,561	7,092	845
1925	1,589	7,424	655
1926	2,633	8,651	810
1927	2,659	8,873	1,020
1928	2,967	6,926	970

NOTE.—Morphine includes diacetylmorphine (heroin).

In addition to the amount of narcotics imported by licensed dealers during the twelve months ended March 31, 1928, the following amounts of such drugs seized for infractions of the Opium and Narcotic Drug Act were disposed of to licensed wholesalers as follows:—

TABLE NO. 4

By the Department of Health ..... nil

By the Department of National Revenue, Customs-Excise Preventive Service—

Drug	Quantity
Gum opium	20 lbs. 5 ozs.
Morphine	50 "
Cocaine	55 "

TABLE NO. 5—Summary of Narcotic Drugs exported from Canada during the fiscal year ended March 31, 1928

Kind of Drug	Destination	Quantity
Cocaine	Newfoundland	1 oz. 33¾ grs.
Cocaine	British West Indies	22 ozs.
Morphine (9,230 tablets and pills)	Newfoundland	3 ozs. 312 grs.
Morphine	British West Indies	6 ozs. 109¾ grs.
Heroin (diacetylmorphine)	Newfoundland	36 grs.

PREPARATIONS CONTAINING NARCOTIC DRUGS

Blackberry Compound (Newfoundland)	160 ozs.	Each fluid ounce contains 15 minums of tincture of camphor compound.
Chlorodyne (British West Indies)	16 ozs.	
Chlorodyne (Newfoundland)	256 ozs.	
Concentrated Tincture of Camphor Compound (Newfoundland)	16 ozs.	
Creo-Terpin Compound (Newfoundland)	80 ozs.	Each fluid ounce contains $\frac{3}{16}$ grs. heroin.
Cholera Infantum Mixture (Newfoundland)	80 ozs.	Each fluid ounce contains 60 minums tincture of camphor compound.
Elixir Heroin and Terpin Hydrate (Newfoundland)	3,800 ozs.	Each fluid ounce contains ½ gr. heroin.
Elixir Terpin Hydrate and Creosote Compound (Newfoundland)	2,960 ozs.	Each fluid ounce contains ½ gr. heroin.
Hypno-Bromic Compound (Newfoundland)	168 ozs.	Each fluid ounce contains ¼ gr. morphine and 1 gr. Cannabis indica.

PREPARATIONS CONTAINING NARCOTIC DRUGS—*Concluded*

Ichthy-Tannic Suppositories (Newfoundland)	576	Each suppository contains 1 gr. opium.
Ointment Galls with Opium (Newfoundland)	6 lbs.	
Ointment Hemorrhoidum (Newfoundland)	8 lbs.	
Syrup White Pine and Tar (Newfoundland)	800 ozs.	Each fluid ounce contains $\frac{1}{4}$ gr. of heroin.
Syrup Bronchial Compound (Newfoundland)	160 ozs.	Each fluid ounce contains $\frac{1}{8}$ gr. heroin.
Syrup White Pine Eucalyptol and Honey (Newfoundland)	2,240 ozs.	Each fluid ounce contains 80 minums tincture of opium camphorated.
Stoke's Expectorant (Newfoundland)	16 ozs.	Each fluid ounce contains 75 minums tincture of camphor compound.
Tincture of Camphor Compound (Newfoundland)	16 ozs.	
PILLS AND TABLETS, ETC.		
Tablets Bronchitis Special (Newfoundland)	500	Each tablet contains $\frac{1}{10}$ gr. of Dovers' powder.
" C.T. Cholera Infantum (Newfoundland)	600	Each tablet contains 3 minums Tincture of camphor compound, B.P.
" C.T. Colic Infantile (Newfoundland)	200	Each tablet contains $1\frac{3}{8}$ minums tincture of camphor compound, B.P.
" Coryza (Newfoundland)	700	Each tablet contains $\frac{1}{64}$ gr. of morphine.
" Diarrhoea (Newfoundland)	500	Each tablet contain $\frac{1}{16}$ gr. morphine.
" C.T. Dovers' Powders (Newfoundland)	9,512	Each tablet contains 5 gr. of opium.
" Fever Improved (Newfoundland)	1,000	Each tablet contains $\frac{1}{20}$ gr. morphine sulphate.
Pills Lead and Opium Acetate (Newfoundland)	2,500	Each pill contains 1 gr. of opium.
Tablets Nausea (Newfoundland)	100	Each tablet contains $\frac{1}{12}$ gr. cocaine hydrochloride.
" Opium Camphor and Tannin (Newfoundland)	500	Each tablet contains $\frac{1}{4}$ gr. of opium.
" Throat Mentholated (Newfoundland)	100	Each tablet contains 1-280 gr. cocaine muriate.
" A.F. Zinc Sulphate Compound (Newfoundland)	12	Each tablet contains $\frac{1}{8}$ minums tincture of opium.

TABLE NO. 6—Number of Aliens deported from Canada having been convicted of offences under the Opium and Narcotic Drug Act, during the six calendar years ended December 31, 1927.

Nationality	1922	1923	1924	1925	1926	1927	Total
Chinese	4	92	125	88	86	55	450
Czecho-Slovak				1			1
East Indian						1	1
English		2	1	1			4
French		2		1			3
Greek		1					1
Irish		1					1
Italian		2	2	2			6
Japanese			1				1
Philippino		1					1
Roumanian					1		1
Scotch				2			2
Swedish			1				1
U.S. Citizens	11	29	24	24	10	13	111
	15	130	154	119	97	69	584

TABLE No. 7—Amount of Narcotic Drugs seized or removed from Illicit Channels during the fiscal year ended March 31, 1928

Opium—			
Opium crude	2 lbs.	8 ozs.	
Opium, smoking	9 lbs.	13 ozs.	98 grs.
Opium, seconds (Yen-She)	2 lbs.	6 ozs.	430 grs.
Opium, powder		1 oz.	50 grs.
291 tins of smoking opium containing	145 lbs.	8 oz.	
7 tins of smoking opium (1 oz.) containing		7 ozs.	
58 jars of smoking opium (1 oz.) containing	3 lbs.	10 ozs.	
10 bricks of smoking opium	10 lbs.		
*Decks of smoking opium	119		
Decks of Yen-She (seconds)	24		
Pills of opium	16		
Tincture of camphor compound		28 ozs.	
Morphine—			
Morphine		732 ozs.	262 grs.
*Decks of morphine	113		
Cubes of morphine (approx. 3 grs. each)	15		
Tablets of morphine	1,666		
Paveral, btls. (1 oz.), each fluid oz. containing 1 gr. of morphine	14		
Cocaine—			
Cocaine		219 ozs.	405 grs.
*Decks of cocaine	79		
Tablets of cocaine	6		
Heroin (Diacetylmorphine)—			
Heroin		36 ozs.	225 grs.
*Decks of heroin	34		
Tablets of heroin	47		
Alleged Drugs (Miscellaneous) including morphine, cocaine and heroin—			
Drugs (alleged)		50 ozs.	375 grs.
*Decks of drugs	91		
Tablets of drugs	638		
Cubes of drugs (approx. 3 grs. each)	4		
Paraphernalia—			
Opium lamps			101
Opium lamp globes			13
Opium smoking pipes			217
Opium scales (Chinese)			22
Opium pipe bowls			45
Scrapers opium pipe			29
Yen-Hocks (needles)			156
Opium tins (empty)			240
Syringes hypodermic			15
Pharmacist's scales			3

PROPRIETARY OR PATENT MEDICINE DIVISION

During the fiscal year ended March 31, 1928, 714 medicinal preparations were proposed for registration under the Proprietary or Patent Medicine Act, 491 were assigned registration numbers, and 223 were rejected. The registration of 5,000 preparations was reviewed and 1928 licenses were issued.

The division continued to pay particular attention to the claims made for registered medicines on the labels, wrappers, literature and newspaper advertisements, having regard to the provisions of sections 8(*e*) and (*f*) of the Act, which, in effect, prohibit all representations of cure, and false, misleading and exaggerated recommendations.

Over 4,300 pieces of printed matter including labels, wrappers, circulars, pamphlets and newspaper advertisements, were criticized. Of this number 1,389 modifications were required, 31 of which were improper newspaper advertisements.

Nineteen seizures were made: seven for improper labelling; one as containing cocaine; two for changing formula and using alcohol without sufficient medication; nine for selling without a license.

The sale of all secret formula non-pharmacopoeial medicinal preparations in Canada is legalized by this Law on condition that no false, misleading or exaggerated claims or representations of a cure for any disease are made on the labels and wrappers, or in any other manner respecting the article.

*Deck is a small package containing from three to five grains of drugs.

In consequence of these restrictions, the department has ruled that no medicine be accepted for registration under this Act which is directed to be used for any of the following ailments, for the reason that eminent medical authorities hold the opinion that such remedies should be administered only under skilled supervision, and that recommendations for their indiscriminate use by the laity are false, misleading, and fraught with grave danger to public health and life, in that specific treatment might be delayed by their use until alarming symptoms had developed, and the disease had reached a hopeless stage. Another feature in this connection is that many cases of the same kind of disease are attended with different circumstances requiring different treatments, as, for example, some types of Goitre respond to iodine preparations whereas the use of iodine may do positive harm to others.

Remedies for goitre,
" " gallstones, kidney stones, bladder stones,
" " high blood pressure,
" " pneumonia,
" " pleurisy,
" " tuberculosis (lupus),
" " scarlet fever,
" " diphtheria,
" " typhoid fever,
" " tumours,
" " cancer,
" " ruptures,
" " obesity,
" " producing flesh,
" " diabetes,
" " Bright's disease,
" " arterio sclerosis,
" " venereal diseases,
" " blood poisoning,
" " locomotor ataxia,
" " infantile paralysis,
" " spinal meningitis,
" " erysipelas,
Earth packs containing medicinal ingredients,
Radium activity remedies,
Remedies for restoring sexual virility,
Specifics,
Abortefacients, etc., etc.

Of the diseases above enumerated, cancer is regarded to-day as the outstanding dreaded disease of the world. Scientific investigation has not produced anywhere the slightest evidence to show that this disease is amenable to medicinal treatment. The dread of cancer and its widespread prevalence have been so exploited by the purveyors of cancer medicines, that it becomes the duty of informed persons to warn the public of the menace that lies in the use of so-called cancer remedies which are put forward by unscrupulous persons or misguided enthusiasts. There is nothing more deplorable or pitiable than the exploitations of the hopes and fears of cancer sufferers in order to enhance the sale of products, which the whole scientific world would pronounce worthless. Cancer research authorities are agreed that time is the vital factor in the treatment of cancer. It is a matter of life and death, and persons who discover cancer in its early stages (i.e. while the disease may still be described as a cancerous growth rather than a true cancer) and resort promptly to competent

skilled treatment, have a chance to get well. Time lost in taking and trying advertised remedies, which are not only useless but frequently increase the misery of the sufferer, results only in the disease gaining such hold that its eradication becomes impossible. It is for these reasons that an earnest endeavour is being made to remove from the market medicinal preparations subject to this Act which are represented in printed advertisements, or by mouth to mouth advertising, as remedies or treatments for cancer. Considerable data, as evidence, has already been procured. At a later date prosecution proceedings will be instituted against all offenders in this regard. Similar action is contemplated respecting manufacturers who recommend medicinal preparations for the other diseases mentioned.

POLLUTION OF INLAND WATERS

It was not until the progress report of the International Joint Commission on the Pollution of Boundary Waters was published that the seriousness of the pollution of the Great Lakes by vessels was appreciated. Vessel sewage was considered next in importance to municipal sewage as a factor in the pollution of the boundary waters. Extensive series of analyses made in 1913 showed that the unrestricted discharge of sewage from vessels (1) menaced the water supplies of Sault Ste. Marie, Michigan, Sault Ste. Marie, Ontario, Port Huron and Sarnia; (2) together with the sewage from towns, polluted the sources of water supply for summer residents and pleasure boats in St. Marys river, lower end of lake Huron, lake St. Clair, and about the Thousand islands; and (3) seriously polluted the waters in the lanes of vessel travel.

In the Final Report of the International Joint Commission issued in 1918, one of the conclusions was that "vessel pollution in certain parts of boundary waters exists to an extent which causes substantial injury to health and property." The commission recommended disinfection of vessel sewage before discharge.

Pollution from vessels is of four kinds: (1) raw sewage in the shape of human excreta, garbage, etc., discharged from toilet and other outlets directly into the lakes; (2) water ballast; (3) dredged material from scows; and (4) oil waste. This pollution affects the public health through contamination of (*a*) municipal water supplies near their intakes, (*b*) water supplies of other vessels following or crossing the same routes, and (*c*) bathing beaches.

The use of water for ballast is largely limited to freight vessels on the Great Lakes and is widely practised. The ballast carried on a large freight vessel is equivalent to from 20 to 60 per cent of the freight tonnage capacity. On a 10,000-ton freighter this is equivalent to 1,500,000 gallons of water. Water ballast is frequently taken aboard in a polluted harbour and discharged in less polluted waters, often within close proximity to some water works intake.

Lake pollution by dredged material is an important public health matter. River dredgings are commonly grossly contaminated by sewage and industrial wastes. Their consistency is often about that of thick cream and if scows encounter heavy seas gross pollution of the adjacent waters results.

The extension of water works intakes farther and farther out from shore corresponds with the encroachment of sewage pollution upon the water supply. Water works intakes at Cleveland, Ohio, have been extended from a point 400 feet out into the lake in 1858 to a point 4½ miles out recently.

There are now at least nine freight vessels and four or five passenger vessels on the Great Lakes using oil for power. In addition there is a considerable number of tankers engaged in the petroleum trade. With the greater use of oil for power by vessels and for general industrial purposes, the extent of oil pollution of the lakes is bound to increase rapidly in the near future.

The question of disposal of sewage and water ballast from lake vessels still remains to be solved. At certain lake ports the pollution due to municipal sewage is considerably greater than that from the vessels, so that regulation of vessel sewage would not be advantageous until the city sewage was disposed of in a more satisfactory manner. It has been demonstrated quite definitely that vessel sewage can be cheaply and easily disinfected by the use of steam before discharge. A practical test of an automatic apparatus designed for this purpose was carried out through two complete seasons upon the lake steamship D. C. Kerr and met with entire success both as to mechanical operation and bacteriological efficiency.

Pollution by water ballast constitutes a more difficult problem. A feasible means for purifying large quantities of ballast water has not been determined as yet. It will probably be sufficient at present to control this practice by suitable regulation designed to limit or prevent the discharge of water ballast in the neighbourhood of intakes and bathing beaches. In the event of failure of such control by regulation more expensive and time-consuming methods of treatment will have to be developed and prescribed.

In the future it is quite possible that the problem of pollution of the lakes by vessels will become more serious with the opening of lake ports to foreign shipping.

Traffic on the Great Lakes has not been limited entirely to traffic between Canada and the United States ports, or port to port traffic in the United States and in Canada. Before and since the war tramp vessels entered the St. Lawrence carrying heavy cargoes as far as Montreal, where a portion was unloaded and then went on to upper lake ports via the various canals.

In 1926 a fleet of ten Norwegian vessels operated between ports in Europe and the Great Lakes. This commerce will bring to the lakes vessels which have hitherto not been operated in accordance with government regulations for lake shipping and may result in the introduction of disease due to contamination of water supplies with sewage from foreign vessels. This commerce will also bring many oil-burning vessels and tankers to the lakes increasing the pollution from this source. During the season of navigation of 1927 a total of 262 vessels entered the Great Lakes from outside seaports. Of this number 14 were vessels in balast and two were privately owned yachts.

During the season of navigation of 1927 visits were made to a number of the larger passenger vessels engaged in traffic on the St. Lawrence river and through the co-operation of the provincial sanitary engineer of the province of Quebec it was possible to induce the vessel owners concerned to very materially improve the quality of the supplies of water for drinking and culinary purposes available aboard such steamships.

Similarly an effort was made to improve the quality of drinking and culinary water supplies available abroad vessels operated on the inland waters of the western provinces. In this connection water supply systems on vessels engaged in traffic on the Red river and lake Winnipeg in Manitoba were examined as were also the drinking water systems of passenger steamships that operate on Kootenay lake, the Upper and Lower Arrow lakes and Okanagan lake. In addition to which copies of the regulations regarding water for drinking and culinary purposes were supplied to the owners and officers of all passenger steamships operated on the inland waters of the western provinces.

The result of investigations made by R. C. Wallace, F.R.S.C. and associates to determine the nature of the disolved and suspended materials carried by the Red river, their variation during the summer months and in winter, their relation to the composition of lake Winnipeg and to such contrasted types as the Mississippi and St. Lawrence rivers indicates that the volume of material carried

in solution by the Red river below Winnipeg is four times as great as that carried by the St. Lawrence at Ogdensburg. Comparatively the St. Lawrence is higher in CO_3, SiO_2, and in Ca; the Red river is higher in Na, SO_4 and Cl. This is typical of the difference between igneous rock and sedimentary rock erosion. The Red river stands at one end of a series, in which the St. Lawrence river, flowing in its upper reaches through igneous rocks, stands at the other. It may therefore be taken to represent the extreme case of river erosion in sedimentary strata rich in sulphates, with a very marked contribution from brine springs which in themselves have no connection with the surface deposits.

Work in connection with the supervision of vessel water supplies was continued throughout January and February, 1928, through the medium of a series of lectures that were given at the Schools of Navigation and Marine Engineering at various ports on the Great Lakes system. In this manner it was possible to get into contact with the coming generation of ships' masters and engineers under the best circumstances and at a time when questions could be asked and answered. The actual field work was commenced early in March, 1927, and carried on until the close of December. The data for the report submitted have been gathered throughout this period.

During the season of 1927, 1,486 routine visits to Great Lakes vessels were made by Health officials, this total including certain examinations of steamship water supply systems which were carried out in response to the special requests of various steamship operators.

In addition to the physical examination of water supply systems installed on various steamships, information and advice of a technical nature and copies of reports showing the quality of water supplies were supplied to navigation companies. Plans of proposed water supply systems for new steamships in course of construction by various shipbuilders in both Great Britain and Canada on being submitted for the approval of this office were examined and approved if in accordance with the regulations.

During 1926 there were constructed in lake shipyards three of the most modern type of bulk freighters that have a combined capacity of 40,000 gross tons. Shipyards on the St. Lawrence river, the Atlantic coast and Great Britain contributed eleven new ships and the Great Lakes fleet was further augmented by the purchase of six steel steamships, and there were in process of construction in lake shipyards for early delivery in 1927, thirteen more steel steamships, eight of this number being bulk freighters of the largest class. Thus in the last five years the United States and Canadian fleets have been augmented by ninety-eight cargo carriers capable of moving 537,100 gross tons of ore in a single trip. A most extensive program of large ship construction was carried out during the winter of 1926-27 at Great Lakes shipyards. This included seven freighters 600 feet and upwards in length, three steel car ferries, four steel package freighters, a self-unloading cement carrier and an immense passenger steamship for the St. Lawrence river service. At the present time thirteen new ships are being built for Canadian shipowners, including two large passenger steamships with stateroom accommodation for 550 persons aboard each vessel.

The volume of water borne commerce carried on the Great Lakes is not generally appreciated. The traffic of the Great Lakes is nearly as great as the total commerce on all other United States internal waterway systems. It is far in excess of the United States coastwise ocean-borne commerce and exceeds the foreign commerce of the Atlantic Pacific and Gulf.

The number of passengers carried, during the season of 1927 by the larger steamships and ferries that ply into Canadian ports on the Great Lakes and St. Lawrence river as given in detail in the table in the appendix to this report, numbered 20,986,726.

Total traffic for 1926 through the Canadian and United States locks at Sault Ste. Marie aggregated 85,679,087 tons, an increase of 3,803,978 tons over the similar period of 1925.

The number of passengers carried for the period mentioned was 52,704, of which number 62 per cent were carried by Canadian steamships.

A statement of traffic via the Welland canal for the season of 1926 shows a total of 5,640,298 tons carried in 5,866 vessel passages, being an increase of 505 vessel passages and 364,238 tons of freight.

Returns for the port of Toronto show that a total of 4,690 steamships, propellors, tugs and sail and tow vessels were listed as arrivals and departures at this lake harbour for 1925 season of navigation.

The traffic between upper lake ports and lower St. Lawrence ports has increased by leaps and bounds. The bulk of the grain tonnage carried down to Montreal from upper lake ports during 1927 was carried by Canadian vessels which made 9,745 trips, compared with 829 by American ships of all classes. Ships of other nationalities made 189 trips. There was an increase of 148 also in the recorded figures representing the number of ships trading from Montreal to lower ports in the St. Lawrence river and to the Maritime Provinces and Newfoundland.

The traffic movement on the St. Lawrence canals during the season of 1927 was the greatest in their history and amounted to 7,912,952 tons. The total grain movement was 176,355,806 bushels, which was 30,142,415 bushels more than the total shipped out during the twelve months of 1926 at New York, Philadelphia and Baltimore.

Certain vessels engaged in passenger traffic to lake and river ports handled 792,255 passengers in the season of 1927, but in addition to these steamships there is a considerable fleet of smaller vessels plying in and out of Montreal for which no information is available at the present time.

The port of Montreal provides passenger services both up and down the St. Lawrence river. Several organizations such as the Canada Steamship Lines and the Clarke Steamship Company are engaged in this business. Up the St. Lawrence there are services to the Lachine rapids, the Thousand islands, lake Ontario, Toronto, Hamilton and Niagara Falls. Downstream there are services to Quebec, Murray Bay, the Saguenay river, the Gaspe coast and Newfoundland, while another operates from Montreal to Bermuda. The passenger traffic over these lines is enormous.

Fresh water hydrants are located at intervals along the water front of Montreal harbour and several crews of men are kept busy during the season of navigation answering telephoned calls for water for boilers and for drinking purposes for vessels about to sail. A motor truck is used to convey the lengths of hose from the drying towers to the vessels. In 1926 there were 682 vessels supplied with a total of 16,129,990 gallons of fresh water.

An official report for the harbour of Three Rivers, P.Q., for 1926 shows 1,986 steamboats, barges and tugs engaged in inland traffic having passed through this port in addition to 195 canal boats and barges engaged in traffic to points in the United States as well as 110 other vessels of various nationalities engaged in ocean traffic, a very decided increase over the traffic of the previous season.

The record of arrivals and departures of vessels at the port of Quebec for 1926 shows a total of 231 coasting vessels as having arrived from Montreal and the Great Lakes, in addition to 299 coasting vessels that arrived at Quebec from lower St. Lawrence points and seawards.

While there has been a decided improvement in the quality of the water supplied for drinking and culinary purposes aboard a considerable number of the Canadian vessels on the Great Lakes, the constant attention of the persons responsible will be necessary in order that water supplies of standard quality may be always available.

Correspondence and interviews with Health and Navigation officials and other persons concerned were carried on regarding the certification of water supplies available at various ports. In this connection visits have been made to nearly all of the Canadian ports on the Great Lakes system to study in detail the facilities available for the supply of drinking and culinary water from certified shore sources.

The interest taken by vessel operators in regard to the drinking and culinary water service is best expressed in the words of a prominent official of the largest Canadian company in a letter last summer. He wrote: "We are keenly desirous to have the drinking water supplies on all passenger and freight vessels of the very best quality."

Throughout the season steamship companies operating vessels in Great Lakes traffic have been supplied regularly with copies of water analyses reports and wherever it has seemed advisable, attention of the management of these organizations was drawn to flagrant carelessness or violation of the regulations.

The amount of office work has grown appreciably coincident with the enlargement of the field of operations and co-operation with other Government departments.

That, since the regulations concerning water for drinking and culinary purposes on vessels navigating on the Great Lakes of Canada became effective, there has been a decided reduction in the number of typhoid fever patients put ashore from such vessels is very clearly indicated by the diagram showing the comparative number of typhoid fever cases on Canadian and United States vessels in Great Lakes traffic in the period 1920 to 1927.

This report is in reality a summary of the results of the co-operation of various Health officials at Great Lakes ports and the definite efforts of eighteen of these persons to secure the maintenance of supplies of water for drinking and culinary purposes of the standard of the regulations. As during the seasons of navigation of 1923, 1924, 1925 and 1926, vessels have been boarded by Canadian Health officials at the ports of Montreal, Kingston, Cobourg, Toronto, Welland canal, Chatham, Windsor, Owen Sound, Midland, Port McNicoll, Sault Ste. Marie, Port Arthur and Fort William. The findings of the subsequent analyses of water samples thus obtained have emphasized the necessity for general compliance with the regulations and have been also a powerful aid in accomplishing the improvements made to the water systems of various vessels.

The sudden death of Mr. R. K. Leslie, of the Provincial Department of Health, at Owen Sound, in midsummer put an end to the very valuable co-operative work that he had been doing in that district since June, 1923.

At the urgent request of various steamship operators concerned and the Director of the Branch Laboratory of the Provincial Department of Health, Sault Ste Marie, Ont., the matter of the water supply available at the Government docks at Sault Ste. Marie was taken up with the Department of Public Works and substantial improvements were subsequently made.

In accordance with a request from the Deputy Minister of the Department of Public Works a visit was made to Fort Frances, Ont., to examine and report upon matters of sanitation that will be involved in the proposal to raise the maximum elevation of the surface of the waters in Rainy lake and Rainy river.

To facilitate the elimination of contamination from the water supply systems of vessels engaged in navigation on the Great Lakes, through the courtesy of the Department of Marine, arrangements have been made to communicate by wireless with vessels whose water supplies indicate very serious contamination. At the request of the Assistant Deputy Minister of Marine an investigation and report was made regarding the sanitary conditions abroad the Canadian Government steamships *Stanley*, *Mikula* and *Lady Grey* at Quebec with special reference to a reported outbreak of typhoid fever.

Regarding the supervision of water supplies for drinking and culinary purposes on railway trains engaged in international and interprovincial traffic, details of this matter have been taken up with the officials of the United States Public Health Service, the various Canadian Departments of Health and the railway companies concerned. Preliminary reports have been received respecting the sources and quality of such water supplies and where these were shown to be contaminated notification of that condition has been sent to the railways interested.

That more care should be exercised regarding drinking water supplies abroad passenger trains is only too evident, it was noted on one occasion at a divisional filling point that the hose used to fill the drinking water tanks was dragged across the dirty muddy roadbed and no attempt made to clean the nozzle before it was inserted into the tank of a passenger coach.

In this connection it is of interest to note that the total number of passengers carried by all of the steam railroads of Canada during the year ended December 31, 1926, was 42,686,166 persons.

TABLE No. 1

The *total number of cases of typhoid fever reported* as originating aboard Canadian vessels navigating the waters of Lakes Superior, Huron, Erie and Ontario *during 1926 was 4,* as indicated in the attached schedule.

During the same period the *number of cases of typhoid fever* reported as *originating from vessels of United States ownership* (including ss. *Lake Gaither) was 28.*

TYPHOID FEVER PATIENTS FROM GREAT LAKES STEAMSHIPS

Steamship	Owners	Number of Cases reported	From where reported	Date	Remarks—Patient's name, etc.
Tug	Reid Wrecking Company	1	Dr. J. W. S. McCullough	June 6, 1926	W. Woodside, deck hand.
Watkins F. Nisbet	Eastern Steamship Co	1	Dr. Donald McKay, Collingwood	July 13, 1926	C. Woolner, seaman.
Elmbay	Tree Line Limited	1	Dr. J. W. S. McCullough	July 30, 1926	A. Marleau, seaman.
Not stated	Key Line, Limited	1	Dr. J. W. S. McCullough	1926	Charles Gregg, Kingston; died from typhoid fever.

TABLE No. 2—CASES OF TYPHOID FEVER REPORTED FROM GREAT LAKES PORTS

Municipality	Year	Number of		Remarks, increase, etc.
		Cases	Deaths	
Montreal	1927	5,121	553	
	1926	93	49	
	1925	161	56	5 directly from steamships.
	1924	139	.....	
	1923	169	47	4 directly from steamships.
	1922	271	63	
	1921	187	62	
Kingston	1926	.....	.....	2 directly from steamships.
	1924	6	.....	All from outside of Kingston.
	1923	9	2	1 directly from steamships. 6 originated outside of Kingston.
	1922	A few	.....	Report of Dr. Williamson.
	1921	6	.....	" "
Oshawa	1925	1	.....	
	1923	8	.....	
	1921	6	.....	
Toronto	1925	43		9 21 contracted infection outside of city.
	1924	39	.....	29 originated outside of city.
	1923	85	.....	2 directly from steamships.
				66 originated outside of city.
Hamilton	1927	3	.....	Probably infected outside of city.
	1926	1	.....	
	1925	18	.....	10 were infected outside of the city.
	1924	13	.....	6 from outside of the city.
	1923	13	4	9 cases infected outside of city.
	1922	21	1	
	1921	21	3	
St. Catharines	1923	13	2	1 from steamships, increase of 11.
	1922	2	1	
	1921	13	.....	All contracted outside of city.
Welland	1926	.....	.....	None from vessels.
	1925	20	5	8 originated outside of Welland.
	1924	19	.....	2 directly from steamships.
	1923	10	.....	3 directly from steamships.
	1922	14	.....	3 directly from steamships.
	1921	4	.....	
Chatham	1924	1	.....	1 case from lake steamship.
	1923	1	.....	
	1922	11	4	
Windsor	1926	.....	.....	2 directly from steamships.
	1925	.....	.....	
	1924	12	.....	1 directly from steamships.
	1923	24	.....	3 directly from steamships.
	1922	15	.....	3 directly from steamships.
	1921	.....	.....	1 from steamship.
Sarnia	1926	.....	.....	1 case from tug, Reid Wrecking Co.
	1925	6	.....	1 case from steamship *Sarnolite*.
	1924	10	2	None.
	1923	2	.....	Both being employees of vessel companies.
	1922	5	.....	4 directly from steamships.
	1921	4	.....	3 directly from steamships.
Collingwood	1926	.....	.....	1 from Great Lakes vessel.
	1925	.....	.....	None from steamships.
	1924	.....	.....	None from steamships.
	1923	1	.....	1 directly from vessels.
	1922	2	.....	2 from steamships.
Owen Sound	1925	28		3 An epidemic of typhoid fever in the city. One from lake vessel.
	1924	8	.....	6 from steamships.
Midland	1925	.....	.....	Two cases from Great Lakes vessels.
	1924	2	.....	Both from Great Lakes steamships.
	1923	11	.....	Increase 10, 6 directly from steamships.
	1922	1	.....	1 from steamships.
	1921	3	.....	2 directly from steamships.

TABLE No. 3.—CASES OF TYPHOID FEVER REPORTED FROM GREAT LAKES PORTS
Concluded

Municipality	Year	Number of Cases	Number of Deaths	Remarks, increase, etc.
Parry Sound	1925	3	.....	
	1924	2	.....	These are two cases infected outside of Parry Sound.
	1923	13	.....	This is for Parry Sound district. Increase 3.
	1922	14	.....	
	1921	11	1	Very bad record. See report of Dr. E. George.
Sault Ste. Marie	1927	9	.....	None from steamships.
	1926	.....	.....	None from steamships.
	1925	3	.....	None from steamships.
	1924	1	.....	None from steamships. Decrease of 4.
	1923	5	.....	2 directly from steamships.
	1922	6	.....	Decrease of 3, 2 from steamships.
	1921	3	.....	1 from steamships.
Port Arthur	1926	.....	.....	
	1925	.....	.....	
	1924	.....	.....	
	1923	7	.....	Increase of 6, 4 originated outside of Port Arthur.
	1922	1	.....	
	1921	1	1	
Fort William	1925	.....	.....	
	1924	3	.....	3 directly from steamships.
	1923	27	1	Increase 6, 11 directly from steamships.
	1922	21	1	Increase 11. Two directly from steamships.
	1921	10	1	3 directly from steamships.

TABLE No. 4—TYPHOID STATISTICS

TYPHOID FEVER CASES REPORTED

Province	Year	Totals Cases	Totals Deaths	Increases Cases	Increases Deaths	Remarks
Nova Scotia	1927	92	.....	.....	.....	
	1926	43	16	.....	.....	
	1925	91	24	.....	3	There was a total of 193 from Enteritis and Diarrhoea in 1925.
	1924	123	24	10	.....	
	1923	113	33	.....	.....	
New Brunswick	1927	241	28	118	8	
	1926	123	20	.....	.....	
	1925	187	17	.....	.....	
	1924	233	18	.....	.....	
	1923	402	28	.....	.....	
Quebec	*1927	5,866	.....	.....	.....	
	1926	.....	256	.....	.....	Increase.
	1925	.....	236	.....	.....	
	1924–25	562	316	.....	.....	
	1923–24	893	334	60	.....	Epidemic at St. Jerome.
	1922–23	833	326	.....	.....	
Ontario	1927	753	.....	172	.....	
	1926	581	77	278	7	Decrease.
	1925	859	70	.....	.....	Outbreak at Courtright and Owen Sound.
	1924	833	76	.....	.....	Port Colborne epidemic.
	1923	1,663	212	1,087	85	Cochrane epidemic.
	1922	576	127	.....	.....	
Manitoba	1927	108	.....	.....	.....	
	1926	128	18	.....	.....	
	1925	.....	23	.....	.....	
	1924	81	20	.....	.....	
	1923	110	24	.....	.....	
	1920	192	.....	.....	.....	

TABLE No. 4—TYPHOID STATISTICS—*Concluded*

TYPHOID FEVER CASES REPORTED

Province	Year	Totals		Increases		Remarks.
		Cases	Deaths	Cases	Deaths	
Winnipeg City	1926	66	8	.....	.....	13 while travelling outside city; 9 contracted disease while travelling.
	1925	42	6	.....	.....	
	1924	36	6	10	.....	
	1923	26	5	.....	.....	Report for Winnipeg states that 15 persons contracted typhoid while travelling outside of city in 1923.
Saskatchewan	1927	82	.....	.....	.....	
	1926	115	30	.....	.....	
	1925	223	39	140	2	
	1924	83	37	68	26	Decrease.
	1923	151	63	.....	.....	
	1922	249	71	66	.....	Increase over 1921.
Alberta	1927	62	.....	.....	.....	
	1926	.....	16	.....	.....	
	1925	127	27	29	3	
	1924	98	24	57	12	Decrease.
	1923	155	36	.....	.....	
	1922	169	50	.....	.....	
British Columbia	1926	64	17	45	.....	Decrease of 45.
	1925	109	12	.....	.....	
	1924	109	15	30	.....	
	1923	79	12	.....	.....	

* From the above figures it will be seen that during 1926 more than half of all the deaths from typhoid fever for all the provinces of Canada, occurred in the province of Quebec. The percentage for the epidemic year, 1927, is of course very much greater.

MARINE HOSPITALS SERVICE

The Marine Hospitals Service is operated in conformity with the provisions of chapter 186, Canada Shipping Act (Sick and Distressed Mariners).

During the year the department operated two marine hospitals, namely at Sydney and Lunenburg in the province of Nova Scotia. At the larger ports contracts were made with the local hospitals for the treatment of sick sailors at fixed per diem rates. At ports of lesser importance the department operated emergency hospitals, and at smaller outports satisfactory arrangements were made for their care and treatment through the agency of the collectors of inland revenue. The following is a list of the hospitals which were under contract with the department during the year 1927-28:—

NOVA SCOTIA

Amherst	Highland View Hospital.
Antigonish	St. Martha's Hospital.
Bridgewater	Dawson Memorial Hospital.
Glace Bay	St. Joseph's Hospital.
Halifax	Victoria General Hospital. City Health Board (Contagious Diseases). Tuberculosis Hospital.
Kentville	Nova Scotia Sanatorium (Tuberculosis).
Middleton	Soldiers' Memorial Hospital.
New Glasgow	Aberdeen Hospital.
North Sydney	Hamilton Memorial Hospital.
Pictou	Pictou Cottage Hospital.
Springhill	Springhill Cottage Hospital.
Windsor	Payzant Memorial Hospital.
Yarmouth	Yarmouth Hospital. Clinic Infirmary.

NEW BRUNSWICK

Bathurst	James H. Dunn Hospital.
Campbellton	Hôtel-Dieu.
Chatham	Hôtel-Dieu.
Moncton	Moncton Hospital.
River Glade	Jordan Memorial Sanatorium (Tuberculosis).
St. John	General Public Hospital.
	St. John County Hospital (Tuberculosis).
St. Stephen	Chipman Memorial Hospital.
Tracadie	Hôtel-Dieu.

PRINCE EDWARD ISLAND

Charlottetown	Charlottetown Hospital.
	Prince Edward Island Hospital.
Summerside	Prince County Hospital.

QUEBEC

Chicoutimi	Hôtel-Dieu.
Lachine	General Hospital.
Lake Edward	Lake Edward Sanatorium (Tuberculosis).
Levis	Hôtel-Dieu.
Montreal	Montreal General.
	Notre Dame.
	Hôtel-Dieu.
	Royal Victoria.
	St. Paul's (Contagious diseases).
	Alexandra (Contagious diseases).
	Grace Dart Home (Tuberculosis).
	St. Mary's.
	Convalescent Home.
Quebec	Hôtel-Dieu.
	Jeffery Hale's.
	Civic Hospital (Contagious diseases).
	Laval Hospital (Tuberculosis).
Sorel	Hôpital général.
Sainte-Agathe-des-Monts	Laurentian Sanatorium (Tuberculosis).
Saint-Jean	Hôpital Saint-Jean.
Three Rivers	Hôpital Saint-Joseph.

BRITISH COLUMBIA

Anyox	Anyox General Hospital.
Alert Bay	St. George's Hospital.
Bella Bella	R. W. Large Memorial Hospital.
Chemainus	Chemainus General Hospital.
Cumberland	General Hospital.
Duncan	King's Daughters' Hospital.
Ladysmith	General Hospital.
Nanaimo	Nanaimo Hospital.
New Westminster	St. Mary's Hospital.
Ocean Falls	Ocean Falls Hospital.
Port Alberni	West Coast General Hospital.
Powell River	St. Luke's Hospital.
Prince Rupert	General Hospital.
Tranquille	Tranquille Sanatorium (Tuberculosis).
Vancouver	St. Paul's Hospital.
Victoria	St. Joseph's Hospital.
	Provincial Royal Jubilee Hospital.
	City Isolation Hospital (Contagious diseases).

Emergency hospitals were operated at the following ports:—

Nova Scotia.—Arichat, Canso, Liverpool, Lockport, Louisburg, and Shelburne.

Prince Edward Island.—Souris.

Quebec.—Port Alfred.

The total number of sick, distressed, and injured mariners treated during the year 1927-28 was 5,217, and the number of days of hospital treatment was 45,207.

The total expenditure for the year 1927-28 was $189,969.80; and the total revenue from the collection of Sick Mariners' Dues was $222,048.08. Detailed information as concerns the expenditure will be found in the financial statement.

A tabular statement of diseases and injuries treated during the year 1927-28 follows.

STATEMENT OF DISEASES AND INJURIES TREATED DURING THE YEAR 1927-28

GENERAL DISEASES					921
Measles		14	Rheumatism		91
Diphtheria		4	Anaemia		7
Chicken-pox		1	New growths—Malignant		11
Mumps		9	Non-malignant		35
Scarlatina		5	Cyst		22
Erysipelas		4	General debility		18
Typhoid fever		32	Ptomaine		9
Typhoid inoculations		37	Influenza		175
Tuberculosis		55	Neurasthenia		17
Malaria		17	Smallpox		2
Syphilis		166	Morphinism		1
Gonorrhœa		182			
Alcoholism		1			
Beri-beri		6			
LOCAL DISEASES					2,779
Diseases of the Nervous System					110
1. Of the nerves				17	
Neuritis			17		
2. Of the spinal cord and membranes				2	
Deg. of lateral column			2		
3. Of the brain and membranes				7	
Meningitis			5		
Encephalitis			2		
4. Functional and other nervous diseases, etc				84	
Apoplexy			5		
Paralysis			10		
Epilepsy			4		
Neuralgia			19		
Headache			6		
Myalgia			34		
Insomnia			3		
Dementia praecox			1		
Melancholia			2		
Diseases of the Eye					92
Conjunctivitis		59	Strabism		1
Choroiditis		4	Keratitis		3
Ulcer cornea		12	Blepharitis		1
Iritis		6	Stye		2
Pan-ophthalmitis		4			
Diseases of the Ear					110
Cerumen		35	Mastoiditis		7
Otitis media		52	Otalgia		8
Otitis externa		8			
Diseases of the Nose					32
Rhinitis		14	Coryza		11
Abscess		1	Frontal sinus		1
Epistaxis		2	Deviated septum		3
Diseases of the Circulatory System					63
Heart disease (valvular)		17	Endocarditis		2
Tachycardia		1	Myocarditis		6
Arterio-sclerosis		2	Angina pectoris		5
Varicose veins		19	Cardialgia		10
Goitre		1			
Diseases of the Respiratory System					358
Bronchitis		126	Empyema		2
Tonsilitis		108	Pleurisy		41
Pneumonia		29	Asthma		15
Broncho-pneumonia		1	Hemorrhage lungs		4
Laryngitis		13	Abscess lungs		1
Congestion lungs		18			

Diseases of the Digestive System			951
Dental caries	242	Diarrhoea	24
Toothache	36	Constipation	35
Alveolar abscess	14	Hernia	80
Enterorrhagia	1	Dysentery	11
Quinsy	7	Enteritis	18
Pharyngitis	25	Dyspepsia	25
Ulcerated stomach	28	Hepatic colic	8
Gastritis	91	Gastro-enteritis	18
Indigestion	93	Intestinal obstruction	7
Pyorrhoea	4	Cholecystitis	5
Fistula	1	Ulcer duodenum	26
Hemorrhoids	32	Peritonitis	2
Appendicitis	88	Abdominal adhesions	4
Colitis	8	Hemorrhage stomach	2
Jaundice	16		
Diseases of the Lymphatic System			22
Adenitis	22		
Diseases of the Generative System			140
Urethritis	21	Hydrocele	12
Stricture	16	Orchitis	28
Paraphimosis	3	Phimosis	5
Chancroids	19	Epididymitis	27
Varicocele	9		
Diseases of the Urinary System			88
Nephritis	21	Hematuria	4
Renal colic	3	Pyelitis	2
Cystitis	20	Diabetes	3
Prostatitis	24	Albuminaria	3
Retention	1	Phosphaturia	1
Renal calculus	6		
Diseases of the Organs of Locomotion			203
Osteitis	6	Periosteitis	4
Sciatica	17	Synovitis	25
Lumbago	66	Arthritis	50
Osteo-myelitis	8	Neurosis	1
Bursitis	18	Myositis	3
Sinusitis	5		
Diseases of the Connective Tissues			324
Cellulitis	203	Abscess	121
Diseases of the Skin			286
Carbuncle	10	Ulcers	36
Boils	91	Whitlow	13
Scabies	24	Scurvy	3
Erythema	9	Impetigo	4
Eczema	28	Psoriasis	5
Herpes zoster	9	Acne	5
Herpes circinatus	2	Anthrax	1
Urticaria	7	Sycosis	4
Dermatitis	35		
General Injuries			129
Multiple injuries	45	Burns and scalds	84
Local Injuries			1,388
Contusions	81	Toes	19
		Foot	46
Injuries:		Hand	91
Face	17	Thigh	11
Eyes	13	Ribs	13
Head	75	Ankle	22
Throat	6	Elbow	15
Wrist	9	Nose	4
Chest	23		
Scalp	2	*Fractures:*	
Fingers	149	Skull	13
Abdomen	3	Ribs	57
Back	29	Leg	15
Side	22	Clavicle	8
Lip	7	Ischium	1
Leg	52	Femur	12
Spine	4	Nose	4
Knee	44	Tibia and fibula	11
Arm	32	Tibia	7
Shoulder	14	Fibula	4
Scrotum	1	Spine	2

LOCAL INJURIES—*Concluded*

Fractures—Concluded	
Ulna	5
Foot	11
Os calcis	2
Patella	1
Elbow	1
Wrist	3
Maxillary	8
Fingers	15
Ankle	5
Arm	14
Radius	10
Metacarpal	3
Scapula	3
Mandible	
Hand	1
Scaphoid	2
Pelvis	1
Dislocations:	3
Shoulder	3
Hand	2
Foot	1
Hip	1
Knee	3
Clavicle	1
Elbow	1
Finger	3
Sprains:	
Leg	2
Hand	7
Hip	3
Back	8
Knee	10
Ankle	25
Elbow	2
Shoulder	5
Arm	3
Wrist	11
Foot	7
Chest	1
Strains	
Side	2
Foot	4
Knee	1
Hip	1
Arm	2
Leg	1
Abdomen	1
Back	13
Frost bite	3
Foreign bodies:	
Finger	3
Hand	5
Eye	55
Chest	1
Thigh	1
X-ray examination	26
Malingerer	1
Exposure	3
Observation	25
Examination	105
No diagnosis	9
Gunshot wound	1

General Diseases	921
Local Diseases	2,779
General Injuries	129
Local Injuries	1,388
Total	5,217

QUARANTINE SERVICE

The following organized quarantine stations were maintained during the fiscal year:—

Province of Quebec.—Grosse Isle in the river St. Lawrence (with Father Point as the inspecting base); with Quebec and Montreal Harbours as substations.

Province of Nova Scotia.—Halifax, the Harbour and Lawlor's Island.

Province of New Brunswick.—St. John, the Harbour and Partridge Island.

Province of British Columbia.—William Head, Victoria, with Vancouver, Esquimalt, New Westminster and their respective harbours, as substations.

Each organized quarantine station is in charge of a medical quarantine officer.

A substation is a port of final destination to which vessels may go after procuring pratique at an organized quarantine station, and where, following discharge of cargo, they can with greater facility be fumigated or disinfested, and where other functions may, when required, be performed as directed by the Department.

Each substation is in charge of the chief or senior immigration medical officer, except when otherwise provided by the Department.

The following table shows the number of vessels and personnel inspected at the several stations:—

Station	Vessels inspected	Passengers			Crews	Cattlemen, stowaways, distressed seamen, etc.	Total persons inspected
		First class	Cabin class	Tourist third, third class and steerage			
Province of Quebec— Father Point	1,159	4,196	24,179	86,626	92,409	357	207,767
Province of Nova Scotia— Halifax	550	4,099	23,617	102,158	72,390	59	202,323
Province of New Brunswick— St. John	319	1,760	852	17,760	20,434	42	40,848
Province of British Columbia— William Head	889	7,097	3,750	15,566	56,603	23	83,039
Totals	2,917	17,152	52,398	222,110	241,836	481	533,977

Persons to the number of 78 were detained in quarantine. Of these, 32 were hospitalized on account of sickness; the remainder were either contacts under observation or members of families accompanying those in hospital.

DISTRIBUTION IN HOSPITAL AND DETENTION BUILDINGS, BY STATIONS

Station	Sick	Hospital days	Contracts and persons accompanying sick	Detention period in days	Total persons detained	Total days in hospital and detention quarters
Quebec, P.Q. (Grosse Isle)	3	49	11	87	14	136
Halifax, N.S. (Lawlor's Island)	1	16	.....	.....	1	16
St. John, N.B. (Partridge Island)	17	376	25	363	42	739
Victoria, B.C. (William Head)	11	139	10	191	21	330
Totals	32	580	46	641	78	1,221

DISTRIBUTION IN HOSPITAL AND DETENTION BUILDINGS, BY DISEASES

Final diagnosis	Sick	Hospital days	Contacts and persons accompanying sick	Detention period in days	Total persons detained	Total days in hospital and detention quarters
Bronchitis	1	5	.....	.....	1	5
Bubo, inguinal idiopathic	1	16	.....	.....	1	16
Chickenpox	2	44	2	44	4	88
Diphtheria	2	12	4	26	6	38
Measles	12	260	18	301	30	561
Observation, pyrexia	2	9	5	23	7	32
Ptomaine poisoning	1	10	.....	.....	1	10
Scarlet fever	3	100	4	144	7	244
Smallpox	2	39	8	63	10	102
Smallpox suspect	1*	4	3	12	4	16
Sore throat, septic	2	35	1	2	3	37
Syphilis	1	14	.....	.....	1	14
Tonsilitis	1	6	.....	.....	1	6
Typhus	1	26	1	26	2	52
Totals	32	580	46	641	78	1,221

*Later diagnosed as non-infectious skin eruption.

Compulsory Fumigation of Ships

Facilities for fumigating ships for the destruction of rats, etc., either by the cyanide or sulphur dioxide method, in accordance with section 37 of the Quarantine Regulations, now exist at the ports of Montreal, Quebec, Three Rivers, Chicoutimi, and Port Alfred, province of Quebec; St. John, N.B.; Halifax and North Sydney, N.S.; Vancouver, Prince Rupert, and William Head (Victoria), B.C.

The following table summarizes the work done at the respective ports:—

DERATIZATION OF SHIPS

Port	Method of rat destruction employed		Certificates of deratization issued	Dead rats recovered	Deratization exemption certificates issued
	Fumigation by sulphur-dioxide	Fumigation by hydro-yanic acid			
Montreal, P.Q.	.....	119	119	1,131	102
Halifax, N.S.	23	5	28	Rats Mice 87 74	5
St. John, N.B.	13	.....	13	233	.....
Quebec, Que.	10	.....	10	11	2
Three Rivers, Que.	1	.....	1	12	.....
Port Alfred, Que.	6	.....	6	.....	.....
North Sydney, N.S.	10	.....	10	.....	.....
Vancouver, B.C.	44	116	160	478	.....
William Head, B.C.	11	.....	11	114	.....
Prince Rupert, B.C.	9	.....	9	91	.....
Totals	127	240	367	Rats Mice 2,157 74	109

The following extracts are from reports received from the respective quarantine officers:—

Grosse Isle, Quebec (Medical Superintendent, Dr. G. E. Martineau)

"Infectious or contagious diseases were reported on 67 occasions, from 24 steamers. These included all the minor infectious diseases. On two occasions modified smallpox was found (on the ss. *Andania* and *Ausonia*). These cases were among the crews.

"On October 11, the ss. *Canadian Trapper* arrived from Halifax, having landed a case of smallpox there and leaving before any action had been taken by the local authorities. On instructions from the Department, this vessel was stopped at Grosse Isle, where the necessary action was taken.

"Deaths were reported on six occasions on the following vessels, from the causes named: ss. *Letitia*—pneumonia; *Empress of France*—typhoid; *Blairathol*—hemorrhage of lungs; *Regina*—lost overboard; *Doric*—myocarditis; *Antonia*—following injury.

"Passengers refusing vaccination under the regulations were vaccinated on seven occasions by your quarantine officers. Three who refused vaccination were sent to the Immigration Hospital at Quebec for the necessary period of observation.

"One birth was reported on November 19 on the ss. *Regina*.

"*Fumigation of Vessels.*—There were 198 vessels ordered routine fumigation at the port of Montreal (see Montreal report). Of these, 101 were fumigated and 97 were exempted. In addition, vessels from plague-infected ports, or having called at plague-infected ports since last fumigation, to the number of 23, were ordered 'mandatory fumigation'. Of these, 5 were exempted from fumigation.

"Port of Quebec.—There were 12 vessels ordered to be fumigated at this port. Of these 1 was ordered fumigated by error, and 1 produced, a certificate of recent fumigation. Both were exempted. The remaining 10 were fumigated.

"Port of Three Rivers.—One vessel was fumigated at this port.

"Port of Port Alfred and Chicoutimi.—Six vessels were fumigated at these ports.

"One case of typhus fever, one of smallpox and one suspected case of smallpox were admitted to the hospital of Grosse Isle.

"Typhus fever.—Michael Malinski and his wife, natives of Northern Poland, left Varsau April 22, were examined and deloused at Volskova (?), the station before Danzig. At Danzig they had another inspection for vermin and eyes. They stated no epidemic existed in their native village and that they did not know of any sickness. Embarked at Liverpool on ss. *Montclare* on May 6, arrived at Quebec on the 14th. The man passed the usual line of inspection, but four hours later he was reported by the Red Cross nurse as being sick on the train, with a severe chill and fever. It is not likely that he had much fever at the time of inspection, for in everting the eyelids, as is done in the case of every foreigner, the inspector would undoubtedly have noticed it. We learned later from his wife that the patient had not been very well the last three days on board ship and that he had been given a strong purgative by the ship's surgeon or the dispenser. He was not reported on the bill of health. Asked how he was feeling when he passed the medical inspection in the Immigration building, Quebec, he replied that he was feeling weak only.

"On admission at the Immigration Hospital, Quebec, May 15, about 11 p.m., the patient had a temperature of 104° with a frequent dry cough and was fretful. Next morning, he was reported as having passed a sleepless night and wanted something to make him sleep.

"In the afternoon, May 15, he became delirious with increased restlessness but got more calm during the night. Delirium did not return. The following days he was rational and took willingly the water, milk and medicine offered him. His axillary temperature ranged between 103 and 104, with rapid pulse. His cough, flushed face and sudden chill suggested pneumonia at first, but examination of the chest revealed only a coarse bronchial breathing. Malaria was eliminated by a negative blood examination. Albumin and biliary pigments were present in the urine

"On the 17th some maculae (8 to 10) were noticed on the abdomen and chest, resembling the rose spots of enteric fever. Next day their number had increased considerably on the legs and arms, chiefly on the flexor surfaces. They were round or oval in form, none were raised, some disappeared on pressure, others did not. The first to appear faded, leaving a dark hue, while the most recent ones were quite red. They came in successive crops, even on the same part of the body; on the 19th and 20th they invaded all the body except the face; there were very few on the neck. Some were petechial, none coalesced. There was some tenderness in the splenic region but no enlargement of the gland.

"On the first appearance of maculae, typhoid fever was at once suspected. A first sero diagnosis was made on the 18th, but no agglutination was obtained with the B. Typhosus and the Para A and B; a second one on the 20th gave a very slight and incomplete agglutination with Para B and none with the Typhosus or Para A. The same day a Weill Felix test was absolutely negative. The patient was then in the sixth day of his illness. In spite of the failure of agglutination of the Proteus X 19, a suspicion of typhus exanthematous was created by the character of the rash and the concomitent symptoms—initial delirium, flushed face, stupor, dry, brown-coated tongue with very red edges, obstinate constipation, high temperature with almost no morning remission and accelerated pulse.

"The case was diagnosed definitely as typhus fever and on instruction of the department, the patient, and his wife, who had remained in the Immigration building, were transferred to Grosse Isle on the 21st.

"The patient's serum was sent to Dr. Harris, bacteriologist of the Department at Ottawa, and to Dr. Piegay, Immigration Hospital, Quebec, both of whom found that it agglutinated with the proteus X 19, thereby confirming the diagnosis of typhus fever.

"No complications occurring, and the patient having fully recovered, he was released with his wife on June 15.

"Smallpox—One member of the crew of the ss. *Andania* suffering from smallpox was landed at Grosse Isle on August 13, with seven contacts. All the contacts showing immunity or positive reaction after vaccination were released on the 19th, in accordance with the Quarantine Regulations. The patient having fully recovered was released on September 1.

"One member of the crew (musician) ex ss. *Andania*, a suspected case of smallpox, was landed at Grosse Isle with three contacts on November 21. These people were all released on November 24, following diagnosis of non-infectious skin eruption. From the history of this case, as given by the ship's surgeon, also from the kind of rash and the parts of the body where it started and was distributed, combined with the fact that he came from a district infected with smallpox, we at first had every reason to believe that we had to deal with a suspected case of modified smallpox."

LAWLOR'S ISLAND, HALIFAX, N.S. *(Quarantine Officer, Dr. J. V. Graham)*

"The following cases of minor infectious disease, with relatives accompanying, were handed over to the Immigration medical officer for treatment in the Rockhead hospital: Measles—25 cases, with 42 accompanying; scarlet fever—1 case, with 4 accompanying; mumps—3 cases, with 4 accompanying; chicken-pox—2 cases, with 5 accompanying; observation for diphtheria—2 cases with 1 accompanying; erysipelas—1 case, with 2 accompanying.

"During the night of January 14, the motor ship *Clydebank* arrived at quarantine from the East Indies. Quarantine inspection was made on Sunday morning, January 15, when the master of the vessel reported one of the Hindu crew had been ill for eight days. Examination of this man revealed an inguinal bubo of unexplained origin. The ship was held in quarantine and the department communicated with by wire. The bubo was aspirated and a smear and cultures made and a guinea pig inoculated, all of which proved negative. Dr. Harris, departmental bacteriologist, who had arrived here in the meantime, however, was of the opinion that this did not exclude the possibility of Pestis Minor with few bacilli. The patient was transferred to the quarantine hospital at Lawlor's island on January 19. The following day I dissected out the gland with the assistance of Drs. Rutherford and Macaulay, and smears and cultures made from the pus taken from the gland proved negative. Two guinea pigs were inoculated subcutaneously and two interperitoneally with pus taken from the gland on the 20th. Pending the result of this, the vessel was given permission to dock, breasted off from the wharf, with rat guards on the mooring lines and the lines wrapped with canvas strips coated with fresh tar for three feet, and the cargo destined to Halifax unloaded under quarantine supervision. The animals inoculated on the 20th, still being normal, as also the animals inoculated on the 15th, the ship was released from quarantine at 1 p.m. on Tuesday, January 24, and the vessel thereupon sailed for Boston. A detailed report of the measures taken against this vessel was made by special delivery letter to the quarantine officer at Boston. A diagnosis of Idiopathic Inguinal Bubo was made, and on the instructions of the department, the patient was transferred to the Victoria General Hospital, Halifax, on February 3, 1928.

"There were 28 vessels fumigated at this station during the year. On five of them, 87 dead rats were recovered after fumigation, and on two of them 73 dead mice were recovered. On February 28, we fumigated for the first time here with Zyklon-B.

"Other than the routine vaccination of members of the staff requiring it this year, there were no vaccinations performed at this station."

WILLIAM HEAD, B.C. (*Quarantine Officer, Dr. C. P. Brown*)

"There has been an increase of approximately 18 per cent in shipping, a general all-round increase of all nationalities. Accompanying this is a decrease in passenger traffic inspected, the freighters being increased as shown by number of crews and vessels. The effect of the European grain trade is shown by the relative decrease of 7 per cent in vessels from the Orient, and increase of 9 per cent in vessels from Europe.

"General health conditions of traffic have been good. There were two vessels quarantined for smallpox. One was a passenger vessel of the Admiral Orient Line. The ship's surgeon had carried out preliminary vaccination so carefully that it was only necessary to detain the patient. The other was a freighter. The patient and one member of the crew who refused vaccination were detained. This vessel had already passed through the United States Quarantine Service at Gray's Harbour, where vaccination was carried out.

"There have been no violent epidemics of quarantinable disease at ports from which our traffic comes during the year. These diseases have been reported as widespread but in small numbers.

"Plague has been reported from the Straits Settlements at Colombo, Sourabaya, Singapore and Bangkok; from Constantinople, Port Said and Alexandria; from Cape Verde and the Canary Islands; from Oran and Algiers; from South America chiefly at Guayaquil, Callao, Rosario and Rio de Janeiro.

"Smallpox has been reported at almost all ports from which we get traffic.

"Cholera has been reported at Singapore, Manila, Hongkong and Shanghai, but not epidemic.

"Typhus has been reported at Oran, Algiers, Cairo, Alexandria and some North and South American ports.

DETENTION DIVISION

"There were twenty-one total detentions during the year. There were no deaths on the station, although one boy died in the Isolation Hospital at Victoria, from general septicaemia following mastoid infection. He came to us with scarlet fever and was later removed to Victoria for operation. There was a very virulent type of both measles and scarlet fever among the children of white parentage returning from Asia during last summer.

"Outside of our staff and a few of the immediate neighbourhood, there were no vaccinations.

FUMIGATION DIVISION

"Total fumigations are just the same as last year. All fumigations on the coast are now carried out under the personal supervision of a medical officer appointed by the department, and are reported to the Quarantine Officer at William Head. Cyanide, either as the barrel method or as Zyklon-B, is the method of choice at Vancouver. Sulphur has been used exclusively at other ports. During the year eighteen vessels have been ordered fumigation as coming from infcted ports.

"Models illustrating ratproofing of vessels and supplied through the kindness of Dr. Grubbs of the U.S.P.H.S., have been exhibited at Vancouver. This has been done with the aim of interesting shipping authorities in this important question. So far, however, there has been very little attempt to carry it out among vessels trading to this coast.

"Notes kept on the deratization of vessels show that the use of cyanide, especially in the form of Zyklon-B, is coming more into favour. The U.S.P.H.S. still does nearly half the fumigating of our total traffic.

LABORATORY

"The laboratory has been kept ready for work. The usual examinations for the station and Bentinck Island have been made.

LAZARETTO, BENTINCK ISLAND

"Equipment, buildings and grounds, generally have been maintained in good order by our staff, supplied with material by the Public Works Department. The Public Works Department completed a fine new building during the year that supplies offices for ourselves and the customs and a residence for the customs officer. We appreciate the added office and storage accommodation very much. They have also rebuilt the shed on the wharf. During the year the telephone line to Victoria has been destrung and put in good condition.

"Quarantine boats under the efficient supervision of the officials at H.M.C. Dockyard, Esquimalt, have undergone extensive repairs. The *Madge* has several new plates. The *Evelyn* was overhauled above the waterline. It has also had several trips to the navy yard for emergency repairs. Both its engine and hull are approaching the limit of safety.

"It is my sad duty to record the death of two members of the staff during the year, that of Dr. H. MacLaren, who died from natural causes September 15, 1927, and of Dr. H. P. Cox, who died following injuries sustained by a fall into the hold of the ss. *Ethelwolf* while on fumigating duty in Vancouver January 9, 1928. All members of your staff here felt the loss of these two associates very much.

"Following the death of Dr. Cox I had the assistance and advice of Dr. W. W. Aylen from January 13 till February 14, 1928, and later of Dr. J. B. Peloquin from February 22 to March 30, 1928. I appreciated their help very much indeed. The work of the department was carried on without delay to shipping either at William Head or Victoria. I also wish to express my appreciation of the co-operation Dr. Cartwright rendered so willingly during this time. He was also given training in cyanide work at Vancouver and eventually received the appointment.

"Dr. W. W. Aylen's visit also constituted the official visit of inspection from the department for the year.

"During the year the station was visited by Mr. J. B. Hunter, Deputy Minister, Public Works Department, July 30, 1927. Delegates from the British Columbia Hospital Association visited and inspected the station September 8, 1927.

"I would like to express my appreciation of the loyal and efficient co-operation of all members of the staff during the year; also to express my thanks to officials of associated Departments and services, both Dominion and Provincial, with whom I have had official dealings during the year. They have uniformly been cordial and willing to assist in any way."

VESSELS' DESTINATION

Vancouver	606 = (67.0%)
Victoria	200 = (22·5%)
New Westminster	45 = (5·0%)
Chemainus	11 = (1·2%)
Englewood	8
Nanaimo	7
Comox	6
Powell River	2
Port Alberni, Ladysmith, Queen Charlotte City, Prince Rupert	1 each

VESSELS' NATIONALITY

British	352 = (39·6%)
Japanese	182 = (20·4%)
U.S. Amer.	134 = (15·0%)
Norwegian	74 = (8·3%)
Danish	26 = (2·8%)
French	24 = (2·7%)
Dutch	24 = (2·7%)
German	24 = (2·7%)
Italian	23 = (2·6%)
Swedish	23 = (2·6%)
Panama	2
Guatemala	1

WHERE FROM

Orient	329 = (39·6%)
Europe	302 = (34·0%)
North America	152 = (17·0%)
Australasia	56 = (6·3%)
Central and South America	41 = (4·6%)
Africa	9

TIME OF INSPECTION

Daytime	521 = (58·6%)	Night time	368 = (41·4%)
Vessels from ports showing quarantinable disease			291 = (33·0%)
Vessels requiring fumigation according to Canadian Regulations			88
Of these, routine fumigations			70
from infected ports			18
Vessels quarantined			2

LABORATORY WORK

Specimens examined, total		166
Smears examined for leprosy		70
Positive	39	
Negative	31	
Sputums examined for T.B.		4
Positive	1	
Negative	3	
Blood smears for malaria		2
Both negative		
Urines examined		4
Rats examined for evidence of bubonic plague		86
All negative		

MONTREAL SUBSTATION, P.Q. (Fumigating Officer, Dr. G. E. Beauchamp)

"Every vessel coming to the port of Montreal with a fumigation order from the Quarantine Officer at Father Point was inspected immediately after arrival by the Chief Fumigator, in order to find out if there was evidence, old or recent, of rat infestation, rat harborage or any indication of rats on board the ship. When the inspector's report was positive the fumigation was ordered. When there was no evidence of rat infestation an extension of time for the fumigation of the ship was granted to twelve months from the date of the last fumigation. A certain number of vessels reported as coming from Mediterranean ports or from ports suspected to be infected with plague were also inspected. When the inspection of these vessels did not show evidence of rat infestation an extension of time for the fumigation was also granted. In the case of vessels arriving in the port of Montreal with an order of mandatory fumigation the ships were fumigated, except in seven cases where it was shown, after a careful inspection, that there was no evidence of rat infestation, old or recent, and no other indication of rats on board of the ship. The log book on board the vessels referred to showed that although they had been to infected or suspected infected ports, they had not been tied to the docks but remained in midstream for coaling or to take a certain quantity of cargo brought to the ship by tenders. These exemptions were granted until the ship's return to the port of Montreal, and it was clearly mentioned that the captain would have them to produce a certificate of recent fumigation in another port or the vessel would be fumigated. Two ships exempted from fumigation at their first voyage were fumigated on their return to the port of Montreal later in the season.

"In the months of May, June, September, October and November, owing to the great number of ships coming to Montreal, the harbour master issued an order that all vessels coming in ballast and which were ordered to be fumigated by the quarantine officer at Father Point, shoud anchor below Longue Pointe until they could have a berth in the harbour. This necessitated the inspection of vessels in midstream. A temporary gasoline launch was provided to take the inspector on board. The cost for the said launch was $2.50 per hour, paid by each vessel inspected according to the time taken for each inspection. In September, at my request, the Department obtained the loan of a small gasoline launch, the *Little Mike*, with a captain and an engineer, from the Department of Marine, for the inspection and the fumigation of ships in midstream. The charges made against the ships for the use of the said launch were $3 per hour. This boat was in service from October 3 until November 21, 1927. All vessels loaded coming direct to the harbour were inspected at their dock after the unloading had been completed. No charges were made against the ships for that inspection.

Number of vessels inspected amidstream at Longue Pointe	43
Number of vessels inspected in the harbour	178
Total	221

"One hundred and nineteen vessels were fumigated during the navigation season from April to December, 1927. Eleven vessels were fumigated with cyanide (barrel method), and 108 vessels were fumigate dwith Zyklon-B. The fumigation with Zyklon-B has proved to be very effective, and although this method is more dangerous than the other methods, I am glad to say that no accidents happened, due to precautions taken and to a strict discipline during the fumigation process. Four men, under the direction of Mr. Michel Perrault, chief fumigator, and under the direct supervision of a medical officer, Dr. Bell or myself, were employed for the fumigation of each ship. The transportation of the personnel and material was made by the gasoline launch. The transportation of the members of the crew of each ship ashore was also made by the launch. Transportation of material in the case of vessels fumigated in the harbour was made by a hired automobile truck, and the cost of same, $3 per hour, was paid by the ships."

Number of vessels fumigated at Longue Pointe	27
Number of vessels fumigated in the harbour	92
Total	119

VANCOUVER, SUBSTATION, B.C. (*Fumigating Officer, Dr. C. Cartwright*)

"The following report is made up mostly from the notes and reports left by the late Dr. H. P. Cox, and covers the period from April 1, 1927, to March 31, 1928.

"It will be noted that the figures for boats done by cyanide as against those done by sulphur, practically reverse the figures for 1926-7.

"It will also be noted that there is an apparent falling off in boats fumigated that are arriving from the Orient, but this is probably due to the fact that many Japanese ships are being fumigated in Japan, and many more are being done in American ports before coming to Vancouver.

"The total number of boats fumigated in Vancouver during the past twelve months was 160.

"Of this number 81 were remanded and 79 done by request.

"Of ships fumigated there were:—

From the Orient	62	
From North America	22	
From Central and South America	13	
From Europe	52	
From Africa	0	
From Australasia	11	
The number of ships fumigated with sulphur was		44
The number of ships fumigated with cyanide was		116
The total number of rats picked up was		478
On ships done by requets	159	
On ships remanded	319	
The total number of rats found after sulphur fumigation was		31
The total number of rats found after cyanide fumigation was		447

"Of 61 ships reported on that had not been previously examined, 40 were clean and free from rats, 15 were doubtful, and 6 showed definite evidence of the presence of rats. Practically all ships have considerable cover for rats and in only a few have I seen any attempt to screen off places where food is stored so as to make them rat-proof. As for actual rat-proofing I have personally only seen one ship—the ss. *West Camargo*—on which any real attempt had been made to make the ship rat-proof and on this ship I found one rat after fumigation. This one was in No. 2 hold and might have got on board from the dock.

"Inspection of wharves and piers showed that rat-guarding regulations were being enforced."

LEPER STATIONS

Under the Leprosy Act (chapter 136, Revised Statutes, 1906), the department administers two leper colonies, one at Tracadie, N.B., the other at Bentinck Island, B.C.

Tracadie, N.B.—This lazaretto is in charge of Dr. J. A. Langis, medical superintendent, assisted by nursing sisters of the Order of St. Joseph. At the close of the fiscal year, March 31, 1928, there were eight inmates being cared for as compared with eleven the previous year. This reduction was due to two deaths, one in July, 1927, the ither in February, 1928; and to the transfer of a Chinese leper patient to the lazaretto at Bentinck Island, B.C.

Of the eight remaining, three have clinical signs of active leprosy; the other five are considered to be arrested cases. The following table furnishes particulars of the respective patients:—

Patient	Age	Sex	Admitted	Nationality	Where from
P.D.	41	M.	May, 1909	French Acadian	Lameque, N.B.
O.L.	82	M.	October, 1910	French Acadian	Neguac, N.B.
B.T.	75	F.	October, 1914	French Acadian	Portage River, N.B.
A. D.	29	F.	July, 1918	French Acadian	Lameque, N.B.
J. D.	67	M.	April, 1919	French Acadian	Lameque, N.B.
V. de L.	28	F.	January, 1921	Scotch and French descent	Toronto, Ont.
K. S. L.	46	M.	October, 1922	Chinese	Montreal, P.Q.
J. P.	33	F.	November, 1926	Russian	Blaine Lake, Sask.

It will be seen that five of the inmates are French-Acadians. These are natives of Gloucester county, N.B., where leprosy first made its appearance in Canada.

The medicinal treatment was similar to that in past year, viz., the ethyl esters of the fatty acids of chaulmoogra and hydnocarpus oils, supplemented by benzocaine and olive oil and a French preparation "Hyrganol Iode".

Bentinck Island, B.C.—This leper station is in charge of Dr. C. P. Brown, medical superintendent of the quarantine station at William Head, B.C., to which Bentinck Island is adjacent. At the close of the fiscal year there were eleven male patients being cared for, this number being one additional as compared with the previous year. Two patients died during the year—a Chinese admitted on April 26, 1927, very far advanced in terminal exhaustion from lesions, due to the disease, on May 23, 1927; and A.B., a Russian Jew, on February 13, 1928, who had been a patient at the lazaretto since 1921.

There were three new admissions during the year, one, referred to in the preceding paragraph, whose illness ended fatally; a Chinese admitted on October 5, 1927, from the Vancouver General Hospital; and the third, a Chinese, transferred from the lazaretto at Tracadie, N.B. The following table furnishes particulars of the respective patients.

Patient	Age	Admitted	Nationality	Where from
F. H.	42	August 28, 1916	Chinese	Vancouver, B.C.
C. K. W.	43	October 4, 1918	Chinese	Vancouver, B.C.
L. A.	31	November 28, 1918	Chinese	Victoria, B.C.
L. B.	37	December 23, 1920	Chinese	Vancouver, B.C.
C. K.	48	March 31, 1922	Chinese	Victoria, B.C.
J. L.	32	August 5, 1923	Chinese	Vancouver, B.C.
E. D.	34	January 31, 1924	Doukhobor	Veregin, Sask.
M. J.	31	May 31, 1924	Chinese	Vancouver, B.C.
W. K. D.	43	October 28, 1925	Chinese	Nanaimo, B.C.
W. H. F.	26	October 5, 1927	Chinese	Vancouver, B.C.
W. S.	37	November 16, 1927	Chinese	Tracadie Lazaretto, N.B.

The condition of these patients may be summarized as follows:—

Six show clinical signs of present active disease.

Two have discharging sinuses on feet, the result of damage done by the disease.

Two have no active clinical signs of the disease, but have had mixed positive and negative smears.

One has no active clinical signs of the disease, and is bacteriologically negative.

Medicinal treatment consists of chaulmoogra oil capsules, with "Moogrol" injected intramuscularly, supplemented by a preparation manufactured according to the formulae of Sir Leonard Rogers called "Alepol," which is a combination of lower melting point fatty acid derivatives than the "Moogrol". The protein shock induced by injection intramuscularly of 3 cc. of milk has also been tried. Dr. Brown reports it is impossible as yet to express an opinion as to the value of these special treatments.

The lepers are housed in cottages, each with his own room and outfit, and look after themselves as far as practicable. Two male caretakers and a trained female nurse are in immediate charge of the leper colony, under the supervision of the quarantine medical officer, who visits the island at weekly intervals, or oftener if needed. The completion of additional cottages now provides available space for six more patients.

IMMIGRATION MEDICAL SERVICE

Ocean passengers, immigrants and non-immigrants (tourists, etc.), to the number of 137,941 were medically inspected at Canadian ports on the Atlantic and Pacific coasts during the fiscal year. In addition 1,646 persons en route to Canada by way of the ports of New York and Boston were medically inspected by officers of the United States Public Health Service.

The following tables show (*a*) the monthly arrivals by ports, and (*b*) a comparison with the figures of the previous fiscal year.

(a) IMMIGRANTS AND NON-IMMIGRANTS MEDICALLY INSPECTED AT OCEAN PORTS

1927-28	Quebec		Halifax		St. John		Montreal		Vancouver		Victoria		Sydney and Nor. Sydney		New York and Boston*		Monthly Totals	
	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.
April	9,896	280	15,366	159	7,077	93	4	.....	270	591	72	107	124	.....	128	50	32,937	1,280
May	15,704	983	5,195	97	20	7	54	9	167	529	88	184	98	6	23	7	21,349	1,822
June	11,986	1,128	2,890	59	17	32	81	4	129	274	66	98	91	12	12	12	15,272	1,619
July	7,775	1,839	1,924	111	14	48	69	21	134	356	25	96	55	20	208	4	10,204	2,495
August	5,628	1,447	1,622	42	16	22	26	2	76	184	38	41	93	30	147	1	7,646	1,769
September	5,287	925	1,178	68	4	18	24	9	84	86	30	31	106	20	117	.....	6,830	1,157
October	5,513	733	1,190	57	5	19	36	4	127	126	23	21	115	13	149	1	7,158	974
November	2,688	322	1,022	45	215	23	7	4	41	64	27	13	81	31	97	.....	4,178	502
December	18	.....	1,745	94	1,047	76	2	.....	68	64	20	22	41	26	383	.....	3,297	282
January	1	.....	1,337	110	965	85	6	.....	40	47	32	27	21	.....	76	1	2,478	270
February	6	.....	1,535	112	1,094	96	.....	.....	58	39	11	14	13	.....	138	6	2,855	267
March	5	.....	8,161	149	3,731	110	.....	.....	206	335	52	69	42	.....	85	1	12,282	664
Totals by Ports—																		
Immigrants	64,507	.....	43,165	.....	14,205	.....	309	.....	1,400	.....	484	.....	853	.....	1,563	.....	126,486	
Non-Immigrants	.....	7,657	.....	1,103	.....	629	.....	53	.....	2,695	.....	723	.....	158	.....	83	.....	13,101

* At ports of New York and Boston, immigrants en route to Canada are medically inspected by officers of the United States Public Health Service.

(b) MEDICAL INSPECTIONS—COMPARATIVE STATEMENT

Fiscal Year	Quebec		Halifax		St. John		Montreal		Vancouver		Victoria		Sydney and North Sydney		New York and Boston		Totals	
	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.	Imm.	Non-Imm.
1926-27	63,924	6,867	37,938	970	16,930	808	313	83	1,248	2,180	522	719	828	164	1,513	916	123,216	12,707
1927-28	64,507	7,657	43,165	1,103	14,205	629	309	53	1,400	2,695	484	723	853	158	1,563	83	126,486	13,101
Increase	583	790	5,227	133	.....	.....	.....	.....	152	515	.....	4	25	.....	50	.....	3,270	394
Decrease	.....	.....	.....	.....	2,725	179	4	30	.....	.....	38	.....	.....	6	.....	833	.....	.....

The following table shows the number of persons medically certified at ports of arrival as prohibited of entry to Canada under the Immigration Act:—

Ocean Ports	Insane, feeble-minded epileptic, etc. Section 3 (a)	Tuberculosis, loathsome or chronic infectious disease Section 3 (b)	Physically defective—liable to become a public charge Section 3 (c)	Constitutional psychopathic inferiority Section 3 (k)	Minor physical or mental defects—affecting ability to earn a living Section 3 (m)	Total
Quebec	28	11	488	10	31	568
Halifax	7	7	115	2	5	136
St. John	.....	4	68	.....	.....	72
Montreal	2	2	2	.....	.....	6
Vancouver	3	.....	3	.....	1	7
Victoria	.....	1	1	.....	1	3
North Sydney	.....	1	7	.....	.....	8
Totals	40	26	684	12	38	800

Tables below show, by ports, the specific mental and physical conditions for which the above persons were medically certified:—

IMMIGRATION ACT, SECTION 3 (*a*) AND (*k*)—PERSONS MENTALLY DEFECTIVE

Disability	Quebec	Halifax	Montreal	Vancouver	Totals
Section 3 (*a*)—					
Epilepsy	4	.....	.....	1	5
Feeble-minded	8	5	.....	1	14
Imbecility	1	.....	.....	.....	1
Insanity	15	2	2	1	20
Section 3 (*k*)—					
Constitutional psychopathic inferiority	10	2	.....	.....	12
Totals	38	9	2	3	52

IMMIGRATION ACT, SECTION 3 (*b*)—PERSONS WITH TUBERCULOSIS, LOATHSOME OR CONTAGIOUS DISEASE

Disease	Quebec	Halifax	St. John	Montreal	Victoria	North Sydney	Totals
Carcinoma	.....	.....	.....	.....	.....	1	1
Gonorrhœa	3	2	.....	1	.....	.....	6
Ringworm	1	.....	.....	.....	.....	.....	1
Sycosis barbae	.....	1	.....	.....	.....	.....	1
Syphilis	2	.....	.....	1	.....	.....	3
Trachoma	2	3	4	.....	.....	.....	9
Tuberculosis	3	1	.....	.....	1	.....	5
Totals	11	7	4	2	1	1	26

IMMIGRATION ACT, SECTION 3 (*c*) AND (*m*)—PERSONS PHYSICALLY DEFECTIVE

Defects	Quebec	Halifax	St. John	Montreal	North Sydney	Vancouver	Victoria	Totals
Absence of members	28	6	10					44
Anæmia		1			1			2
Blindness, partial or total	6		1		1			8
Blood vessels, defects of	40	3						43
Bones, diseases of	2							2
Chest conditions	6							6
Corpulence						1		1
Deaf and dumb	3	1						4
Deafness, partial or total	34	5	7		1			47
Debility		4						4
Deformities	101	21	7	1	4	1		135
Dermatitis	2							2
Depressed skull			1					1
Diabetes	2							2
Dwarf			1					1
Ear, diseases of	2							2
Epileptiform seizures	1							1
Encephalitis lethargica			1					1
Glandular conditions	2					1		3
Goitre	66	11	7					84
Gun shot wounds		1						1
Heart conditions	41	11	4			1		57
Hernia	26	7	1					34
Hydrocele		1	1					2
Infantilism	2							2
Joints, diseases of		1						1
Loss of power of members	34	14	4	1				53
Malaria, recurring	2	1	1					4
Malnutrition		1						1
Myxoedema	1							1
Nephritis	3							3
Nervous debility		1						1
Neurasthenia	7							7
New growths	1							1
Paralysis	2		2					4
Poor physique	6	4	2					12
Pregnancy, illegitimate	2	1						3
Rheumatism	8		1					9
Senility	2	13	1				1	17
Speech, defects of	21	1	2					24
Varicose veins			2					2
Vision, defective	66	10	12					88
Totals	519	119	68	2	7	4	1	720

The following table has reference to ocean passengers (immigrant and non-immigrant) who, on arrival at the Canadian ports named, were detained for medical or surgical treatment until they were cured or fit to travel. The list includes those persons detained at the Savard Park Immigration Hospital, Quebec, and the Rockhead Immigration Hospital, Halifax, on account of minor infectious diseases.

Treated for	Quebec	Halifax	St. John	Montreal	Vancouver	Totals
Abortion	1					1
Abscess	9	8				17
Acne		1				1
Adenitis		2				2
Appendicitis	1	3				4
Asthma		1				1
Boils	4	4				8
Bronchitis	11	9				20
Burns	3		1			4
Carbuncles	2	3				5
Cardial hypertrophy		1				1
Cartilage displaced		1				1
Catarrhal jaundice	1					1

Treated for	Quebec	Halifax	St. John	Montreal	Vancouver	Totals
Cellulitis	1	2				3
Cervical fistula	1					1
Chancroid	1					1
Chickenpox	7	3				10
Childbirth	2	4	3			9
Cholera infantum		1				1
Cholecystitis	1					1
Colds, acute	13					13
Colitis	1					1
Conjunctivitis	15	14			2	31
Constipation	2					2
Contusions		3				3
Coryza	1					1
Cystitis	1		1			2
Debility	4					4
Dermatitis	3					3
Eclampsia		1				1
Eczema	2	3	1			6
Endometritis		1				1
Enteritis	1*	1				2
Erysipelas		1				1
Epididymitis			1			1
Folliculitis	2					2
Food rash	1					1
Fractures	3	1	1			5
Gastritis	2					2
Gastro-enteritis	3					3
German measles	2					2
Goitre		1	1			2
Heart disease		2*				2
Hematoma		1				1
Herpes	1					1
Hypertrophy of thymus	1*					1
Impetigo	14	5				19
Indigestion, acute	2	2				4
Infected members	6					6
Influenza	5	2				7
Laryngitis	2					2
Marasmus	1					1
Mastitis	1					1
Mastoiditis	1					1
Measles	51	27				78
Mumps	6	3				9
Myocarditis	2			1		3
Otitis media	2					2
Otorrhoea			1			1
Para-typhoid		1				1
Pleurisy	2			1		3
Pneumonia	5†	13†			1*	19
Psoriasis		1				1
Pulmonary congestion	1					1
Pyrexia			2			2
Quinsy		1	1			2
Ringworm	1	5	1			7
Scabies	2	1	1			4
Scalds	1					1
Scarlet fever	7	4				11
Seasickness		1	4			5
Seborrhoea capitis	2					2
Septic wounds	7	13	3			23
Sprains	10					10
Synovitis	2					2
Tonsillitis	13	7				20
Trachoma, cicatrized	2					2
Ulcerations	1		1			2
Uremia	1*					1
Urticaria	2					2
Vaccinia	1					1
Wounds	7		1			8
Totals	263	158	24	2	3	450

*1 died during detention. †2 died during detention.

Of the immigrant and non-immigrant ocean passengers who, on account of apparent mental or physical defects, were detained for secondary examination, the following were either (*a*) released as not coming within the "prohibited

classes" referred to in Section 3 of the Immigration Act, or (*b*) entered on record cards as having minor defects only. The enumeration includes those persons held at Quebec and Halifax as contacts of minor infectious disease cases.

(*a*) PERSONS DETAINED FOR MEDICAL OBSERVATION, BUT SUBSEQUENTLY RELEASED AS "NEGATIVE"

Reason for Detention	Quebec	Halifax	St. John
Observation, chest	2		
" chickenpox	3	3	
" epilepsy	1		
" eyes	1	5	
" general	38	13	20
" genito urinary	2		
" heart			2
" measles	17	20	
" mental	9		
" mumps		3	
" nails	1	1	1
" petit mal	1		
" pyrexia	5		1
" rash	5		
" refusing vaccination	3		
" scalp	2		
" scarlet fever	11	5	
" skin		1	
" throat	6		
Totals	107	51	24

(*b*) CASES RECORDED FOR MINOR DEFECTS

Quebec	550
Halifax	145
Total	695

MONTREAL

During the fiscal year a total of 742 persons who were being deported on account of becoming public charges, due to mental or physical defects, were examined by medical officers of the department at the port of Montreal.

QUEBEC

The following additional activities were carried out by the medical staff of the department at the port of Quebec:—

LABORATORY EXAMINATIONS

Blood—		
Culture	2	
Counting of R.C	6	
Estimation of hemoglobin	1	
Malaria	1	
Wassermann	6	(At V.D. Lab.)
Widal	1	
Weil-Felix	3	
Feces—		
Koch bacillus	9	
Occult blood	2	
Ova	1	
Pus—		
Glandular abscess	1	
Venereal and other sores	9	
Secretions—		
Nose and throat	18	
Skin and appendages	16	
Sputum	32	
Urine—		
Chemical	143	
Microscopic	47	
Water—		
Bacteriological examination of specimens from Father Point	3	
Bacteriological examination of specimens from Grosse Isle	5	
Total	306	

EXAMINATIONS IN X-RAY DEPARTMENTS

Chest	26
Limbs	10
Total	36

MISCELLANEOUS

Evidence by members of medical staff before Immigration Department boards of inquiry	67
Examinations of civil servants	7
" " pilots	14
Visits to city hospitals	12
" civil detention	20
" jail	3

Immigration Medical Service Overseas

On February 15, 1928, it became compulsory for all prospective emigrants to Canada from European countries, including the British Isles, to undergo medical examination before being permitted to enter this country. Prior to that date, while all immigrants were subject to medical line inspection on arrival at Canadian ports, compulsory medical examination before embarkation applied only to those emigrating under Government assisted passages, to unaccompanied women, and to juvenile immigration schemes. While the new policy did not come into complete operation until the date above-named, prospective emigrants were given the option of being examined by the augmented staff of Canadian medical officers sent overseas as early as November, 1927.

Under the old scheme, British and Continental doctors selected from an official roster were utilized to conduct the examinations. Their medical certificates were then reviewed by the London office of the Canadian Immigration Medical Service. Where doubt existed as to their actual condition, a personal examination was made by the Canadian medical officer in charge, or by his assistant.

The following statements summarize the various activities:—

ROSTER DOCTORS' CERTIFICATES REVIEWED

April	4,967	September	1,726
May	5,187	October	1,043
June	3,548	November	561
July	2,819		
August	2,298	Total	22,149

EXAMINATIONS BY CANADIAN MEDICAL OFFICERS

April	235	November	839
May	267	December	1,966
June	296	January	5,066
July	206	February	11,750
August	168	March	21,765
September	98		
October	89	Total	42,745

Of those examined, the following were found to come within the "prohibited classes" under the Immigration Act:—

MENTAL CONDITIONS

Section 3 (*a*)—	
Dementia praecox	10
Epilepsy	26
Feeble-minded	216
Idiocy	6
Imbecility	6
Maniac depression	1
Melancholia	1
Mentally deranged	2
Previously insane	18
Section 3 (*k*)—	
Constitutional psychopathic inferiority	145
Total	*431

*Of this number, 305 were thus certified under the new scheme by Canadian medical officers, during the period November, 1927, to March, 1928, inclusive.

TUBERCULOSIS, LOATHSOME OR CONTAGIOUS DISEASE

Section 3 (*b*)—	
Acne vulgaris	1
Eczema	4
Favus	8
Herpes	1
Ichthyosis	4
Impetigo	2
Psoriasis	4
Ringworm	14
Scabies	13
Sycosis barbae	5
Trachoma	307
Tuberculosis—adenitis	13
lupus	11
nephritis	1
pulmonary	49
surgical	15
Venereal disease—chancroid	2
gonorrhoea	14
syphilis	16
Warts, multiple	1
Total	*485

*Of this number, 377 were thus certified under the new scheme by Canadian medical officers, during the period November, 1927, to March, 1928, inclusive.

GENERAL PHYSICAL DISEASES AND DEFECTS

Section 3 (*c*)—	
Absence of members	105
Amenorrhoea	1
Anaemia	34
Blindness	6
Blood vessels, defects of	132
Bones, diseases of	11
Cataracts	2
Chest conditions	141
Chorea	5
Deafness	185
Deaf and dumb	6
Debility	86
Deformities	356
Dermatitis	62
Diabetes	4
Dumb	3
Ear, diseases of	41
Enuresis	4
Glands	14
Goitre	70
Heart conditions	508
Hernia	128
Hydrocele	1
Iritis	2
Joints, diseases of	26
Loss of power of members	69
Malaria	15
Section 3 (*c*)—	
Nephritis	19
Neurasthenia	85
New growths	7
Ovarian cyst	1
Poor physique	261
Pregnancy	7
Rheumatism	27
Senility	31
Speech, defects of	45
Vision, defects of	350
Total	*2,850

* Of this number, 1,785 were thus certified under the new scheme by Canadian medical officers, during the period November, 1927, to March, 1928, inclusive.

CHRONIC ALCOHOLISM

Section 3 (1)	3

MINOR MENTAL OR PHYSICAL DEFECTS

Section 3 (*m*)—	
Mental defects	12
Physical defects	901
Total	* 913

Whereas it is the task of officers of the Immigration Medical Service overseas to diagnose the mental and physical condition of prospective emigrants to Canada, and to assess their medical rating under section 3 of the Immigration Act, the final responsibility as to their acceptance or rejection rests with the Department of Immigration.

Before the close of the fiscal year, in order to carry out the new policy, medical examination centres in charge of Canadian doctors were established in the British Isles and Europe as follows:—

Great Britain—London.	Ireland—Belfast.
Bristol.	Londonderry.
Birmingham.	France—Paris.
Liverpool.	Belgium—Antwerp.
York.	Holland—Rotterdam.
Glasgow.	Germany—Hamburg.
Inverness.	Poland—Danzig.
	Latvia—Riga.

LABORATORY OF HYGIENE

During the year the activities of the laboratory were varied. Following upon the publication by Dr. Glover of New York of the formula of his "Cancer Medium," whereby he claimed cultures of the specific microbe of cancer could be isolated, attempts were made to corroborate his claims. Following carefully Dr. Glover's technique, cancerous tissue from three cases of the disease were closely investigated and in no instance could Glover's claims be substantiated. The results attained were quite in conformity with those published by Kolmer of the Dermatological Institute of Philadelphia.

As in the past, close collaboration was maintained with the Food and Drugs Laboratory and with the Chief Sanitary Engineer of the department, whereby bacteriological examinations of various kinds of foods, and water samples from various vessels plying on the Great Lakes were duly examined.

At the request of the expert retained by the Provincial Board of Health of Qubec investigating the typhoid outbreak in Montreal, the laboratory took part in certain critical investigations with satisfactory results.

Supplies of both plague and Asiatic cholera vaccines have been purchased and supplied to the quarantine medical officers of the various stations controlled by the department.

A case of suspected plague on board a ship entering the port of Halifax from Calcutta, India, was made the subject of close inquiry. Laboratory tests, carried out under the supervision of the chief of this division, ultimately showed that the incident was not due to plague, but to another type of infection harmless to the general public.

About the close of the year investigations were begun in reference to the presence of Malta fever in Ottawa and vicinity, which indicated the presence of this type of infection. The work is being carried on with the anticipation that publication of the research will be accomplished in the course of the coming year.

* Of this number, 548 were thus certified under the new scheme by Canadian Medical officers, during the period November, 1927, to March, 1928, inclusive.

In the laboratory an incubator room was built with the collaboration of the supervising architect of the department, as an experiment to try out new systems of insulation. The experiment has proved to be quite a success and will be made the subject of a publication at a later date.

Upon invitation from the authorities of the United States Department of Agriculture, Bureau of Food and Drugs, the laboratory collaborated in an investigation of the biological assay of digitalis, according to the United States Pharmacopoeia method, and was brought to a satisfactory conclusion. A new method in interpreting the facts of the biological assay of digitalis by means of probability curves was undertaken, but as yet is not concluded. It would appear, however, that by this method more concise results of analyses will be attained. Should this be so, the method will be published in one or other of the scientific journals later on.

In anticipation, during the forthcoming year, of the application of the new regulations as applied to the Food and Drugs Act of 1927, work is under way in the laboratory for the manufacture of standard preparations of digitalis, strophanthus, ergot and pituitary extract. These standards are to be made available to all Canadian manufacturers of these pharmacopoeial preparations.

DIVISION OF VENEREAL DISEASE CONTROL

The work of venereal disease control was carried on, as in preceding years, with the aid of the Dominion grant, which has been allocated to the provinces for the past nine years. The grant this year was distributed as follows:—

Alberta	$ 6,504 21
Ontario	32,425 93
Nova Scotia	5,790 00
Saskatchewan	8,372 80
Manitoba	6,743 67
New Brunswick	4,287 22
British Columbia	5,798 23
Quebec	26,098 47
Printing and stationery	2,837 58
Total	$98,858 11

While it has been considered advisable to decrease the amount of the grant, in view of the fact that the period of organization is over, a period when expenditure by the provinces was at its height, the need for a continuance of the work is only too evident. In spite of the fact that a campaign of an intensive nature has been carried on during the past nine years, there is no dearth in the number of cases being treated at the clinics. In this regard, it is important to remember that, in the majority of cases, syphilis requires approximately three years of treatment before the question of cure may be entertained, and in some cases, in view of the fact that the Wassermann reaction is continuously positive in spite of treatment, a longer period may be necessary. Prolonged treatment makes for an accumulation of cases, so that the clinics are well filled with patients at all times. This is particularly true of the large cities.

The treatment of gonorrhoea, in spite of popular opinion, is usually prolonged before cure can be definitely established. In the case of complications, such for example as chronic prostatitis, the patient may return year after year for treatment.

The total number of new cases of venereal diseases admitted for treatment for the calendar year 1927 was, approximately, as follows:—

—	Treated in Clinics and Institutions	Reported by Physicians	Total
Syphilis	7,262	4,022	11,284
Gonorrhoea	9,495	7,186	16,681
Chancroid	281	75	356
	17,038	11,283	28,321
Total number of treatments administered			493,016
Total number of laboratory examinations			74,605

The number of male cases under treatment outnumbers the female, although in recent years there is an increase in the number of female patients. This increase is due to the large number of females who are leaving the protective atmosphere of the home and entering industrial life, as well as the opportunities afforded by the automobile. It is found in our cities, as in those of other, countries, that houses of prostitution have diminished in numbers and that the motor car is taking their place. Late marriages are, no doubt, a concomitant factor.

Patients in our clinics, while composed in the main of the labouring class, are representative of all and comprise all age groups, although the greatest prevalence is between the ages of nineteen and twenty-five years. Many of the female patients are quite young; some of them of school age.

An important factor that contributes to promiscuity is uncongenial surroundings. Boarding-houses, for example, are dreary places at best, and companionship is sought in public places such as the streets and public parks. This contributes to the sum total of venereal disease.

The cost of treatment at the hands of a private physician is prohibitive for most. The earning capacity of the average young man or woman between the ages of nineteen and twenty-five is small and quite inadequate to meet the cost of treatment, so that the necessity of continuing free treatment is self-evident. If free treatment is not available, it is neglected, and the end result is injurious to the individual and to society.

It is found that a large percentage of those suffering from syphilis do not continue treatment until a cure has been established; in fact, the majority drift away from the clinic and eventually relapse. It is, unfortunately, the remote effects of syphilis that are particularly dangerous. The disease in the later stages attacks the vital organs, such as the heart, arteries and nervous system, and early death or insanity closes the case. It is most often just at the time that a man's responsibilities are at their greatest—between the ages of 40 and 50 years—that these later symptoms, which result in invalidism or death, occur. The diminished earning capacity of the father who is suffering from syphilis lowers the status of the family, so that often it is reduced to living in slum areas which have a demoralizing influence on the children, and these children contribute their quota to delinquency and crime.

The follow-up system that is being carried out with some degree of effectiveness in all of our clinics, together with the educational methods which are part of the duties of the physicians and nurses attached to the clinic, do much to encourage patients to continue treatment until discharged. This is an important feature of the work. An increasing amount of preventive work is being done in pre-natal clinics and maternity hospitals.

Treatment in penal institutions continues to be effectively carried out. In penitentiaries, jails and other penal institutions, all prisoners are given a physical examination and a Wassermann is taken. This is followed by treatment where necessary. Treatment may be enforced after the prisoner is discharged, until such time as it is considered no longer necessary.

The facilities afforded by laboratories in all of the provinces are increasingly in demand. This is due largely to the fact that the younger generation of physicians is fully informed of the importance of a Wassermann and takes advantage of it.

Free treatment continues to be afforded sailors at the several ports, in accordance with an international agreement whereby sailors of all nationalities are to receive free treatment at all world ports.

The campaign of education has been continued. During the year approximately 140,000 pieces of literature were issued. Lectures have been continued as usual.

In European countries statistics would appear to indicate a diminution in syphilis. Although physicians are apathetic towards reporting their cases, their returns as well as those of our clinics would appear to indicate a similar condition in this country. One cannot state as yet whether this is of a permanent nature, but there is no doubt that the intensive campaign of education and provision of free treatment, which have reached such great numbers, cannot but have a beneficial effect. There does not appear to be a corresponding reduction in the prevalence of gonorrhœa, but there is no doubt that the incidence is not so great as it was when the venereal disease campaign was instituted. On the whole, the work of venereal disease prevention and treatment is being carried out efficiently.

DIVISION OF CHILD WELFARE

Co-operation has been maintained and increased throughout the year with the Departments of Immigration and Colonization, Trade and Commerce, External Affairs, Justice, Interior (North West Territories and Yukon Branch), Labour, Indian Affairs and the Dominion Bureau of Statistics as well as with the provincial authorities in child welfare, health and vital statistics.

Maternal Mortality

The Report of the Maternal Mortality Inquiry which was made at the request of the first Conference on Medical Services in Canada on December 20, 1924, was completed on October 28, 1927, and was published on January 31, 1928, as Publication No. 37 in the National Series of "The Little Blue Books." The number of copies printed was 30,000 and a copy was sent to every legally qualified medical practitioner in Canada and also on request to a large number of nurses, provincial officials, members of voluntary societies, clergymen and others, and were distributed on request.

A number of requests were received for a popular edition of the report. These requests came chiefly from clergymen, service clubs, nationally organized associations of women and from the general public. It was not found possible to draft one publication which would be suitable for general distribution and this difficulty was met by the preparation of publications 38 and 39 entitled, respectively, "Mother—A little Book for Women" and "Mother—A little Book for Men," each of which contained a summary of the results of the Inquiry. These publications were received from the Government Printing Bureau on February 9, 1928.

The importance of maternal mortality and maternal morbidity to the country and the efforts made by the above-mentioned, especially by members of the medical profession, provincial and municipal officials, voluntary asso-

ciations, the clergy and the press, resulted in great attention being directed to this subject. The demand for "The Canadian Mother's Book," both in English and in French, was much increased. Special committees were appointed by various professional and other organizations to study the subject and to bring forward plans to lessen maternal mortality and morbidity.

Attention has been drawn by a medical officer of health to the fact that every mother in his district is supplied with a copy of "The Canadian Mother's Book" either before or immediately after the birth of her child, distribution being made by the public health nurses who visit the homes, and also to the fact that maternal mortality in this district has been reduced to about 4 per 1,000 living births.

Hospital Map of Canada

The Canadian Council on Child Welfare presented a request for the preparation of a map similar to the Hospital Map of Canada, giving special information in regard to medical and surgical care and treatment for disabled children in Canadian hospitals. It was decided that this request should be complied with and that information on this subject should be obtained by the Canadian Council on Child Welfare and transmitted to the department.

In the meantime, the Canadian Medical Association established a Hospital Division and appointed Dr. H. A. Agnew as director, and, at the request of that association, a copy of "The Hospital Map of Canada," along with a few necessary corrections and other information placed on file since this publication was issued, was transmitted to Dr. Agnew. It is intended that a complete handbook of all hospitals and sanitariums in Canada including mental hospitals shall be prepared and that the manuscript shall be submitted to the department by the Canadian Medical Association, Hospital Division.

National Baby Week Council

At the request of the National Baby Week Council, co-operation has been given as before in informing the provincial authorities of the conditions for the Imperial Baby Week Challenge Shield Competition. The competition this year was for the best local "Baby Week Campaign." Entries were received by the council from India, Newfoundland, Ceylon, the Irish Free State and Canada. The shield was awarded to Bellary municipality in Madras and a certificate of merit was awarded to the Calgary Council on Child Welfare, Calgary, Alta.

Child Welfare Work for Children not in their Own Homes

A publication has been prepared and will be issued immediately on "Child Welfare Work and Workers for Children not in their Own Homes." It contains a statement of the modern principles of child welfare as approved by the provincial superintendents in this work and also a directory of the Government officials and voluntary organizations concerned.

Children needing Special Care

Progress has been made during the year in the care, treatment and education of children needing special care. This work has been done under the auspices of the Red Cross, the Rotary Club, the Canadian Council on Child Welfare and others.

A special ward for disabled children was opened in October, 1927, in the Brantford General Hospital. It is known as the "Edgar Allen Ward," being named after the President of the International Association for Crippled Children. The Ontario Association (Rotary) with the co-operation of the Ontario Gov-

ernment has appointed an executive secretary. Public school classes for disabled children in several cities have met with gratifying success and are much appreciated. Transportation facilities for these pupils in Toronto, Ottawa and elsewhere are excellent.

Vocational schools for children to whom manual training is of fundamental importance on account of their backwardness in academic subjects have made marked progress during the year in Ontario and other provinces.

Outpost Homes

Correspondence courses established by the Departments of Eduction in Ontario and Manitoba have helped to educate children whose homes are so far from school that they are unable to attend classes. The "School Cars" continue to discharge an important duty in northern Ontario. Co-operation with inspectors and teachers engaged in this work has been maintained throughout the year.

Publications

THE LITTLE BLUE BOOKS

"The Canadian Mother's Book".—The Confederation Diamond Jubilee edition of "The Canadian Mother's Book" was published on September 1, 1927.

A supply of the "Card for The Baby's Mother" along with a letter *re* the method of distribution of these cards was sent as usual to all registrars, deputy registrars and sub-deputy registrars of vital statistics at the beginning of the official year.

A deputation of Ukrainians waited on the Red Cross authorities in June to renew their request that "The Canadian Mother's Book" should be translated into Ukrainian.

Requests for "The Little Blue Books" were received from Australia, New Zealand, the Dominion of South Africa, Kenya, the Gold Coast Colony, Kumasi, Madras, British Honduras and other parts of the British Empire, also from Reims in France, Lausanne in Switzerland, from Siberia and from Kameido, Koyko-Fuka, Japan.

The National Series

No. 37. Maternal Mortality in Canada.
No. 38. Mother. A Little Book for Women.
No. 39. Mother. A Little Book for Men.
No. 40. Child Welfare Work and Workers in Canada for Children Not in Their Own Homes.

This series was published during the year and some thousands have been distributed on request.

DIVISION OF HOSPITALIZATION AND SANITATION

HOSPITALIZATION

Tuberculosis Sanitoria

The persistent interest evinced by the medical profession, health authorities, sociologists and welfare workers indicates a marked desire to improve existing conditions, by adopting the principle and practice of modern hospital planning for the care of those suffering from tuberculosis.

The Maritime Provinces, as also other provinecs, desired to have the chief of the division visit various centres for the purpose of overlooking the situation concerning this phase of hospitalization. Many centres were visited, including Amherst, Truro, New Glasgow, Antigonish, Pictou, Sydney, Glace Bay, New

Waterford, North Sydney, Bridgewater, Middleton and Kentville, all of Nova Scotia, Charlottetown and Summerside of Prince Edward Island and Ste. Agathe, P.Q.

In most of these places, suitable sites for the tuberculosis unit planned by the department were decided upon, having due regard to orientation and existing services from the general hospitals. Orientation is one of the chief phases in planning tuberculosis sanatoria, as also general hospitals, since without exception, wherever possible, patients' quarters should have a southern or southwestern exposure.

One of the chief appeals to the public of such a unit as before described is that it overcomes the prejudice based on sentiment, namely, the avoidance of members of the family being removed sometimes hundreds of miles away from home while undergoing treatment.

The lack of knowledge of the fundamentals involved in such hospitalization was evinced by the avid interest exhibited and inspires the department to prepare, in due course, a brochure, with suitable plans and data, covering tuberculosis sanatoria, thereby, in a measure, supplying the want so urgently presented.

The following excerpt, received from the Nova Scotia Tuberculosis Commission, summarizes the reaction of the visits made by the chief of the division, i.e.:—

"In view of the very definite information presented and the thorough manner in which it had been worked out, the tuberculosis unit, adaptable as an annex to the varied conditions of our rural hospitals, made a splendid impression on the communities visited, and the practicability of the scheme was recognized. A great deal of difficulty has been experienced and, in fact, the commission did not seem to be able to get any definite information concerning the character of additions required and the cost. Therefore, with this definite information, we are able to give the different hospital centres a more complete idea of what is required."

In the case of Prince Edward Island, appreciation was expressed through the Chief of Red Cross Services, by stating that the visit was very successful, the officer gaining complete victories at full meetings of the trustees and medical staffs at the various centres, and further, although funds for the moment were lacking, each and every centre was anxious to proceed with the scheme. The department was advised that, as a result of the visit, in a few hours educational work along the lines referred to had been accomplished, which otherwise would have taken years.

The aftermath of the visits has proved interesting, inasmuch as inquiries have been received by the department from various hospitals, city medical officers, and private medical practitioners, some asking for plans for sanatoria of twenty-four and thirty bed capacity, others for sleeping porches in connection with private houses together with specifications and costs of same.

The following letter, received by the department, is typical of the interest being evinced by the medical profession in the housing of tuberculosis patients directly under their charge, namely:—

"I am connected with our Colchester County Anti T. B. League. There is no hospital accommodation for advanced cases in the county and I feel that there is a great need for some means where these cases can be cared for, as well as isolated from their family as much as possible. Then again, there are many patients taking the cure at home, and in many cases they do quite as well as if they were in a sanatorium. Even those cases, however, who go to the sanatorium, either at the expense of an Anti T. B. League, or by private means, do not remain at the sanatorium but for a very few months. They also require some place where they can carry on the treatment at home after their return from the hospital."

Another inquirer from Halifax, N.S., sought information as follows:—

"Could you let us have complete plan and specification of a self-contained sanatorium of cheap construction, of about twenty-four or thirty beds, that is, two wards of twelve or

fifteen beds, one for men and one for women; also provision for nurses' quarters. There are some local hospitals so small and inadequately equipped that the idea of an Annex with a view of getting any auxiliary service from the hospital is out of the question, and a request has already been made by one town for such plan as is now asked for."

The City Medical Officer of Health, Sydney, N.S., requested the department to advise upon the remodelling of the vacated air service buildings at North Sydney, for the purpose of a sanatorium. The existing buildings were inspected, and duly reported upon adversely.

At the request of the President of the Laurentian Sanatorium, Ste. Agathe Des Monts, P.Q., the chief of the division visited this sanatorium, with a view of advising as to the best means of overcoming many undesirable conditions which obtained. Phases were covered such as heating; ventilation; lighting; water supply; suitable fuel; insulation of buildings; laundry; nurses' home; gymnasium; infirmary; lack of sterilization; sanitation in treatment of infectious cases; fire protection; refrigeration; general arrangement of patients' quarters; laboratory; X-Ray accommodation; occupational therapy; pathological building for research work, solaria and recreational facilities.

The department's services were recognized by the president, as follows:—

"We wish to thank your department for the courtesy of your visit and to assure you that the suggestions which have been made will be of tremendous value to our institution."

The President of the Greenfield Memorial Preventorium, Ste. Agathe Des Monts, P.Q., also asked for advice upon insanitary conditions and planning generally. Tersely described, the Directors determined, upon receipt of the report, that this institution should be remodelled on the lines advocated, when funds were available.

GENERAL HOSPITALS

Interest is being sustained in the department's publication No. 34, inquiries being received from all parts of the British Empire, Europe and the United States of America, as also from each and every province of the Dominion.

The division is working in close co-operation with the Canadian Medical Association, in advising upon problems affecting new small community hospitals, and in the words of the secretary of the association, "it is surprising how much such a department as yours seems to be needed, judging by the letters which have been coming in."

The Dominion Council of Health had under advisement a communication from the Deputy Minister of Health and Public Welfare, Manitoba, which letter stated that many requests were being received from rural communities for advice regarding the building of small hospitals, and further, that no definite plans were available which could be submitted to the inquirers on the lines of standardization. As a result there is a tendency to use large unoccupied dwelling-houses, or to build new hospitals subject to the individual peculiarities of local communities. This is felt to be unsatisfactory and, in his opinion, it would be greatly appreciated if the necessary advice could be given. The great need in this province is for the twenty, fifteen and ten-bed hospitals.

Great Britain has become interested in the type of hospitals built in Canada, inasmuch as the office of the High Commissioner of Canada, London, England, asked to have transmitted at the request of the Ministry of Health, Great Britain, information regarding some of the larger hospitals in Canada, the particulars especially desired being general layouts, detailed plans of patient accommodation and section of measurements and heights of the various storeys. Information was furnished by the department through the courtesy of the architects of the following hospitals, i.e., Toronto General Hospital, Ottawa Civic Hospital, Notre Dame Hospital, Montreal, and Royal Victoria Maternity Hospital, Montreal.

Reviewing general hospitals throughout the Dominion, it is to be noted that sterilization is often lacking; operating rooms are planned with southern exposure; sanitation faulty; nurses' homes more elaborate than hospitals, all of which, it is suggested, has been caused by those responsible having visited more ambitious projects, but nevertheless faulty, and applying both faults as well as desirable phases to their own problems; in fact, copying without knowledge of the fundamentals involved.

Ofttimes it has been observed that laundries are so located that soiled linen, which incidentally may be infected, has to be traversed over the same route as that used for clean linen.

Ventilation, in the smaller general hospitals, requires much more consideration than apparently has been given to it, since, in many cases, mechanical ventilation has been installed and discarded after the first month or two of operation, whereas if the gravity system had been installed, such cost would have been avoided, as well as better results obtained.

Food services would appear in many cases to have been looked upon as of secondary importance, which is a great mistake, inasmuch as without a satisfactory food service, cost of maintenance and administration increases in leaps and bounds, and has been proved on more than one occasion to be the cause of hospitals not being self-sustaining.

One of the most serious phases observed is that of the lack of sterilization for dishes, as also no provision made for preparation of diets, and, further, unsuitable materials used for floors and walls, more particularly so in the case of operating rooms, corridors and service departments.

A predominant factor governing most of the rural hospitals is that of cost and, doubtless, many of the errors and faults observed have been caused through lack of funds. However, many such objections could be overcome at a minimum cost and the hospital service throughout the Dominion greatly improved by careful consideration being given to the problem at its inception.

Public health officers, hospital trustees and the medical profession generally are taking advantage of the service of the department in advising upon general hospitals, as is evidenced by a few excerpts given hereunder, namely:—

"Prince Edward Island Hospital, Charlottetown, P.E.I.

"Your officer has been in Charlottetown and has been good enough to go over with us the plans of a proposed new hospital that we have in contemplation. He has given us some very valuable advice and has dictated a schedule of changes and improvements that he would suggest should be made. We are much indebted to him for his kind services in that way."

"Town of New Glasgow, N.S.

"The town of New Glasgow, N.S., has been favoured with two short visits, in the last few weeks, from your officer who specializes in hospital construction.

"On behalf of our citizens I wish to thank you, most sincerely, for your kindness in giving us the benefit of his services.

"While in New Glasgow, he met a number of our leading men, interested in hospital work, and all were highly pleased with his evident ability and pleasing personality."

"Ross Memorial Hospital, Sydney, N.S.

"During your officer's short visit to our hospital last spring, we went over sketches of a proposed new wing to the present building. On submitting these sketches to the architect, Mr. McCormick, he advised us to write you of our proposition.

"It is necessary for various reasons that we have a forty bed hospital, this would mean that the new wing should comprise about five private rooms; men's ward, about six bed; children's ward; nursery; operating room with sterilizing; scrub-up; doctors' dressing room; nurses' work room; X-ray; laboratory; kitchen; nurses', sisters' and maids' dining rooms; a small serving room and bathroom on each floor.

"Thanking you sincerely for any assistance you may give us in making our little hospital meet the requirements stated above."

The appreciation shown for the department's service by the Reverend Sisters, at this hospital, was expressed as follows:—

"We wish to extend our sincere appreciation to you for the work done by the members of your department. The valuable assistance, rendered us by the chief of the division, in regard to the plans of the proposed extension of our hospital, is, we assure you, very much appreciated. We congratulate the department in having for one of its members a person so generous and obliging."

"We have no doubt that when our hospital is completed according to these sketches, and suggestions, that we will have every facility to assist us in caring for the sick."

"Dawson Memorial Hospital Bridgewater N.S.

"We were visited a short time ago by your hospital consulting architect.

"The floor under our operating table needs to be renewed and he suggested the use of a material known as T. M. B. for this purpose.

"Will you be good enough to give us the benefit of your information and experience regarding this material and its suitability for our purpose, and any advice that may suggest itself to you in connection with its application and use.

"Also please let us know where the material can be obtained, and about what it should cost."

"Hamilton Memorial Hospital North Sydney, N.S.

"I am writing on behalf of the management of the Hamilton Memorial Hospital, here, of which I am secretary.

"Starting back as early as last March, we had correspondence with your Hospital Architect, in connection with the building of a new hospital adjoining the one which we now have.

"He has been with us four times since that, giving us advice, and have finally arrived, through his assistance, at a definite plan which we propose going ahead with.

"The reason that I am writing this letter particularly is to thank your department, on behalf of the management for the valuable assistance given us. Your officer has been most thorough in his work and extremely patient, as you can well understand a man dealing with people like the ordinary hospital management would have to be. It certainly was a grand thing for us that we were able to have the assistance of such a man."

"Soldiers Memorial Hospital, Middleton, N.S.

"Blueprints, in regard to the proposed changes in connection with the above hospital are gratefully acknowledged, and will be at once submitted to the hospital commission.

"I thank you personally for your interest in the matter and consider that we were exceedingly fortunate to have such valuable suggestions."

IMMIGRATION AND INFECTIOUS DISEASES HOSPITALS

The new units, as also the remodelled hospitals of the Immigration Medical Service, have attracted the attention of many of the provincial health authorities, as also civic health officers, so much so that requests have been made to the department to advise upon projected schemes for cities, as well as remodelling existing Civic Hospitals.

The Civic Hospital for Infectious Diseases, Quebec, P.Q., is an example, and the way in which the service is recognized is stated in the following excerpt, received from the Director of the Bureau d'Hygiene, Quebec, P.Q., namely:—

"We had the visit of your hospital consulting architect and, together, have visited our Civic Hospital, also that of the Department of Immigration at Parc Savard.

"He has furnished us with a lot of information regarding our hospital, put himself at our disposal for the future and has been kind enough to accept our plans to revise same.

"Let me congratulate you on the way the Immigration Hospital is kept; we have found there much precious information concerning the upkeep of a modern hospital.

"I thank you sincerely for your courtesy in offering us your Architect's services, and am sure that the city will benefit by his advice."

Close co-operation with the Superintendent of Marine Hospital Service resulted in the completion of the Marine Hospital and Infectious Diseases Unit, Sydney, N.S., which remodelling and new construction represents the latest principles, practices and thought on modern hospital planning.

Inter alia, the Provincial Health Officer of Nova Scotia is of opinion that the Infectious Unit is the best of its kind throughout the Dominion.

The Immigration Hospital, Savard Park, Quebec, P.Q., owing to the increased service required for hospitalization of immigrants arriving at the port of Quebec, demanded an additional unit. Plans and data were prepared by the division, and the work is now proceeding. When completed, it is anticipated this hospital will prove a very important instrument of efficiency in the Immigration Medical Services.

Various works and repairs have been dealt with at the quarantine stations throughout the Dominion, in conjunction with the Department of Public Works. These stations to-day are better from a physical point of view (both planning and equipment) than in any previous year of the service.

MENTAL HOSPITALS

Another phase of hospitalization which seems to be gathering impetus is that of hospitals for the feebleminded. This urge was met by the division preparing a Compilation of Current Data with Illustrations, Plans, Etc., covering the many phases for the care of the feebleminded, namely, the problem, institutions, colonies, hospitals, training schools, clinics and buildings generally. This compilation has 190 pages, with index, appendix and bibliography, and is profusely illustrated, covering every kind of institution on the American continent. The value of the compilation can be judged by the letters received from members of the Dominion Council of Health, which are given hereunder, namely:—

"University of Toronto, Director School of Hygiene and Connaught Laboratories

"I have just received to-day the very valuable compilation on mental hygiene, which you have prepared for the members of the Dominion Council of Health. We are very pleased indeed to receive this material. It will be exceedingly useful both to the members of the staff and to students in the various departments in the School of Hygiene in this university. I wish to congratulate you upon the very successful completion of a work of a thoroughly difficult character."

"Department of Public Health, Nova Scotia

"I have your letter of February 15 and to-day, by express, there was received the compilation of current data dealing with the care of the feebleminded, which is very valuable."

"Department of Public Health, Alberta

"I beg to acknowledge with many thanks receipt of the volume compiled by you on mental hygiene. This volume contains much useful information."

"Department of Health, New Brunswick

"Am in receipt under separate cover of compilation by your hospital consulting architect, respecting 'Mental Hygiene,' for which I am much obliged. It is of interest and value."

"British Ministry of Pensions

"I wish to express my best thanks to the Deputy Minister of Health for the splendid work which you have sent me.

"I shall read the compilation with every attention and with special appreciation because it deals with the subject in which I have long been interested.

"The Ministry of Pensions has provided institutional care in its own specially designed hospitals for those mental defectives who come under its authority.

"The Mental Deficiency Act of the United Kingdom was passed shortly before the Great War and consequently was neglected in favour of less constructive activities. The implementation of this Act left a lot to be desired when I was last in England two years ago.

"Again recording my very best thanks to the Deputy Minister of Health."

The Board of Governors, Verdun Protestant Hospital, Verdun, P.Q., enlisted the aid of the division in remodelling the various units. Several interviews took

place between the Governors and the chief of the division, culminating in sketch plans being prepared and data furnished which eventuated in the final program being proceeded with to the satisfaction of all those concerned.

HOSPITALS IN ARCTIC

At the request of the Northwest Territories and Yukon Branch, Department of the Interior, plans, specifications, schedule of materials and data were prepared for a hospital and medical officers' residences to be erected in the Arctic Circle. Special attention was given to the insulation of the buildings in view of climatic conditions prevailing in that region. One of the residences is beng built this year, and it is the intention to erect others, in due course, in different parts of the Arctic Circle for the housing of the medical officers in charge of the care and treatment of Eskimos.

The Food and Drug Laboratory at Winnipeg has further been developed, plans for which were prepared and data comparable to the requirements of the service.

SANITATION

The publications covering water supplies and sewage treatment prepared by the division are still in great demand, to such an extent that reprints are being made of publication No. 1, covering "Sewage Treatment for Isolated Houses and Small Institutions where Municipal Sewage System is not Available," and publication No. 17, under the caption of "Safe Water Supplies for Isolated Houses and Institutions where Municipal System is not Available."

Publication No. 36, "Pasteurization of Milk for Small Communities," has been translated into French, to meet the demand of the French-speaking people of the Dominion.

The chief of the division, when visiting Prince Edward Island, was asked to report upon a dairy, at the request of the Medical Officer of Health, owing to the fact that such dairy claimed its milk was being pasteurized efficiently, but upon inspection, the plant was condemned, which action was particularly interesting, inasmuch as the plant had been supplying so-called pasteurized milk to one of the hospitals, thereby incurring risks distinctly prejudicial to the health of the people.

Vast correspondence has been received by the department, seeking information on sanitation, having a range of cleaning camp wells, constructing septic tanks, wells in basements, sewage systems, filtering rain water for drinking purposes in schools, rural drainage, and disinfectants, all of which is conclusive evidence of the value of the department's publications.

FINANCIAL STATEMENTS

SUMMARY OF EXPENDITURE BY SERVICES, FOR THE FISCAL YEAR 1927-28

Service	Gross expenditure	Refunds	Net expenditure
	$ cts.	$ cts.	$ cts.
Civil Government salaries	172,557 73	550 00	172,007 73
Civil Government Contingencies	62,243 93	2,586 82	59,657 11
Food and Drugs	96,368 53	1,845 57	94,522 96
Opium and Narcotic Drugs	24,753 75	786 70	23,967 05
Proprietary or Patent Medicines	2,309 91	.....	2,309 91
Laboratory of Hygiene	3,993 51	230 01	3,763 50
Pollution of Inland Waters	9,083 04	296 47	8,786 57
Marine Hospitals, etc	193,182 30	3,212 50	189,969 80
Quarantine	175,350 88	1,334 14	174,016 74
Leprosy	22,452 38	50 50	22,401 88
Public Works Health Act	3,545 82	103 69	3,442 13
Immigration Medical Inspection	150,131 42	735 10	149,396 32
Venereal Diseases	98,858 11	.....	98,858 11
Gratuities, C.S. Act, 1918, Sec. 30	1,796 66	.....	1,796 66
St. John Ambulance Association	5,000 00	.....	5,000 00
Victorian Order of Nurses	10,000 00	.....	10,000 00
Canadian Council on Child Welfare	5,000 00	.....	5,000 00
Canadian Social Hygiene Council	10,000 00	.....	10,000 00
Canadian Tuberculosis Association	25,000 00	.....	25,000 00
Canadian National Committee for Mental Hygiene	10,000 00	.....	10,000 00
Canadian Dental Hygiene Council	5,000 00	.....	5,000 00
	1,086,627 97	11,731 50	1,074,896 47

REVENUE COLLECTED FROM VARIOUS SOURCES FOR THE FISCAL YEAR 1927-28

Service	Total Revenue	Refunds	Net Revenue
	$ cts.	$ cts.	$ cts.
"A"—Food and Drugs	11,193 55	35 00	11,158 55
"B"—Opium and Narcotic Drugs	7,078 50	115 00	6,963 50
"C"—Patent Medicines	7,140 75	579 75	6,561 00
"D"—Sick Mariners' Dues	223,283 46	1,235 38	222,048 08
"E"—Casual Revenue	39,063 22	19 07	39,044 15
	287,759 48	1,984 20	285,775 28

"A"—FOOD AND DRUGS NET REVENUE FOR 1927-28

Province	Analysis Fees	Penalties	Costs	Total
	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	31 00	.....	.....	31 00
New Brunswick	.....	100 00	10 00	110 00
Quebec	5 00	1,685 00	440 00	2,130 00
Ontario	4,170 00	875 00	317 30	5,362 30
Manitoba	125 00	50 00	25 00	200 00
Saskatchewan	.....	150 00	30 00	180 00
Alberta	.....	775 00	280 00	1,055 00
British Columbia	15 00	1,575 00	500 25	2,090 25
	4,346 00	5,210 00	1,602 55	11,158 55

"B"—OPIUM AND NARCOTIC DRUGS NET REVENUE, 1927-28

—	Business Licenses	Export Licenses	Import Licenses	Penalties	Total
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	60 00	.....	.....	.....	60 00
New Brunswick	80 00	.....	.....	.....	80 00
Quebec	1,110 15	15 00	280 00	1,680 00	3,085 15
Ontario	1,085 15	5 00	110 00	952 00	2,152 15
Manitoba	225 00	.....	.....	.....	225 00
Saskatchewan	55 00	.....	.....	100 00	155 00
Alberta	105 00	.....	5 00	300 00	410 00
British Columbia	150 00	.....	.....	611 20	761 20
Foreign	25 00	.....	10 00	.....	35 00
	2,895 30	20 00	405 00	3,643 20	6,963 50

"C"—PATENT MEDICINES NET REVENUE, 1927-28

—	Penalties	Registra-Fees at at $2 each	License Fees at $1.00 each	Total
	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia	.....	24 00	78 00	102 00
New Brunswick	.....	38 00	126 00	164 00
Prince Edward Island	.....	.....	6 00	6 00
Quebec	50 00	502 00	1,651 00	2,203 00
Ontario	.....	392 00	2,278 00	2,670 00
Manitoba	.....	34 00	184 00	218 00
Saskatchewan	.....	.....	39 00	39 00
Alberta	.....	48 00	127 00	175 00
British Columbia	.....	30 00	75 00	105 00
Foreign	.....	73 00	806 00	879 00
	50 00	1,141 00	5,370 00	6,561 00

"D"—SICK MARINERS' DUES REVENUE, 1927-28

Province	Total	Refunds	Net
	$ cts.	$ cts.	$ cts.
Nova Scotia	51,606 28	101 26	51,505 02
New Brunswick	20,187 38	124 00	20,063 38
Prince Edward Island	1,340 54	2 00	1,338 54
Quebec	67,365 53	482 06	66,883 47
British Columbia	82,783 73	526 06	82,257 67
	223,283 46	1,235 38	222,048 08

"E"—CASUAL REVENUE, 1927-28

—	Total
	$ cts.
Fumigation of Ships	22,253 50
Hospital care of passengers	14,354 00
Use of launch	1,800 00
Refunds acct. of previous year's appropriation	549 65
Sundry sales	87 00
	39,044 15